COMMENCEMENT

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

ONLINE CELEBRATION PROGRAM

HONORING THE GRADUATES OF 2020

FRIDAY, MAY 29, 2020

WELCOME

A warm welcome to MIT Commencement 2020! This year, in celebrating our graduates, we also honor their incredible courage and resilience in persevering through the disruption and disappointment of the past few months. And we extend our deepest thanks to their families and friends, whose love, inspiration, and encouragement carried our students to this important moment.

Today's graduates will join a global family of more than 141,000 MIT alumni around the world. Across time and across distance, MIT is a community held together by profound values: The ideals of excellence, integrity, meritocracy, and openness. A passion for solving tough problems. A commitment to take the high road. And a rare set of skills that can be applied in countless ways to serve the common good.

As we congratulate our new graduates on all they have accomplished, we dream of the wiser and kinder world they can help create.

L. Rafael Reif
President

Photos
Cover: Christopher Harting
Above: Bryce Vickmark

CONTENTS

ORDER OF THE PROGRAM

PRELUDE
To The Light, To The Flame
composed by Jamshied Sharifi '83
conducted by Frederick E. Harris, Jr.
performed by The MIT Wind Ensemble

WELCOME
Robert B. Millard '73
Chairman, MIT Corporation

INVOCATION
Reverend Thea Keith-Lucas
Episcopal Chaplain, MIT

COMMENCEMENT ADDRESS
William H. McRaven
US Navy Admiral, Retired
Chancellor, University of Texas System, 2015–2018

COMUSICA
Introduction by Eran Egozy '95
Professor of the Practice, Music and Theater Arts, MIT

SALUTE
Peter X. Su PhD '20
President, MIT Graduate Student Council 2018–2020

SALUTE AND TURNING OF THE CLASS RING
Nwanacho Nwana '20
President, MIT Class of 2020

GREETINGS FROM THE INTERNATIONAL SPACE STATION
Christopher J. Cassidy SM '00
US Navy Captain
Commander, Expedition 63

CHARGE TO THE GRADUATES AND CONFERRING OF DEGREES
L. Rafael Reif
President, MIT

SALUTE TO THE ADVANCED DEGREE RECIPIENTS
Esther Duflo PhD '99
Abdul Latif Jameel Professor of Poverty Alleviation and Development Economics, MIT

CLOSING REMARKS
Robert B. Millard '73
Chairman, MIT Corporation

SCHOOL SONG
Chorallaries of MIT

TAKE ME BACK TO TECH
MIT Community

WELCOME INTO THE MIT ALUMNI ASSOCIATION
R. Erich Caulfield SM '01 PhD '06
President, MIT Alumni Association

ONLINE

DOWNLOADS
The MIT Parents Association invites you to celebrate the graduates of 2020 with its DIY Commencement Party Kit, including customizable party decorations, sing-along music and lyrics, a discount code to the COOP, and more.

SOCIAL MEDIA
Tag your social media posts with #MIT2020. Connect on Twitter (@MIT, @MITCommencement, @MITStudents, @MIT_Alumni), Instagram (MITpics, MITStudents, MITalumni), and Facebook (Facebook.com/MITnews, Facebook.com/MITAA). Go to socialmediahub.mit.edu to experience the day through MIT social media accounts.

INFINITE THANKS
To the speakers, musicians, hosts, planners, producers, and all who applied mind, hand, and heart to the creation of Commencement 2020. Credits, acknowledgments, and video from today's proceedings are available online: commencement.mit.edu

IN MEMORIAM

Our friends are remembered with love by the Class of 2020

Henoch Argaw

Henoch Argaw was born in Finland and raised in Colorado. Before coming to MIT, he was a recipient of the President's Award for Educational Excellence and served as a member of the College Board Advanced Placement Advisory Board, treasurer of the National Chinese Honor Society's Grandview Chapter, and vice president for Mu Alpha Theta.

At MIT, Henoch lived in East Campus and was majoring in Computer Science, Economics, and Data Science. A motivated self-learner, he found joy at an early age in teaching and mentoring others. Henoch—who spoke English, Amharic, Mandarin, and Arabic—developed several games and apps for Android, including flashcards in mathematics, Chinese, and Arabic. He also created an open-source code of the Lightning Network for private cryptocurrency transactions for the MIT Media Lab's Digital Currency Initiative.

Henoch was an officer for the MIT Club Sports Council, treasurer for the MIT Bitcoin Expo 2017 and the MIT Ethiopian-Eritrean Student Association, and participated in numerous activities that included the MIT International Science and Technology Initiatives program in Jordan, as well as the Tae Kwon Do, Bitcoin, and Skydiving Clubs. Known for his humble, gracious, and quiet spirit, Henoch loved to run track and to play trumpet, soccer, table tennis, chess, and poker. He passed away in the fall of 2017, during his second year at MIT, and his legacy lives on in the Henoch Argaw Foundation, which recognizes and supports academic excellence in science and technology.

Katherine Hunter

Katherine Hunter was an active member of the MIT community—she touched the lives of many through her time on the MIT Women's Lightweight Crew team and as a member of the Cycling Club, Dance Troupe, and Sigma Kappa Sorority. Kate came to MIT with the hope to make the world a better place and she took on projects toward achieving this goal. One of these took place during the summer after her first year, when she worked on air pollution sensors for a rural community in Chile that relied on wood-burning stoves. She also participated in the MIT Undergraduate Research Opportunities Program, working for the Haystack Group in the Computer Science and Artificial Intelligence Laboratory on a project to develop tools to help new programmers.

Outside of her academics and extracurriculars, the communities and people in Kate's life were immensely important to her; her friends and family knew her to be strong, kind, and funny. Her inner fire shone in her passion for computer science, her commitment to excellence, and her warmth toward others. Kate lived a wonderful life and her memory inspires us as we take our own next steps.

SCHOOL OF ARCHITECTURE AND PLANNING

Bachelor of Science in Architecture

Course IV

Department of Architecture

Jackie Jia Qi Lin
Also with a Major in Course XI

Michelle A. Menkiti

Alicia L. Nimrick
Minor in Materials Science and Engineering
Minor in Computer Science

Caroline Rosenzweig

Qicheng Zhao

Bachelor of Science in Art and Design

Course IV-B

Department of Architecture

Zidane Abubakar

Jierui Fang
Minor in Computer Science
Minor in Biomedical Engineering

Effie Jia
Minor in Environment and Sustainability

Bachelor of Science in Planning

Course XI

Department of Urban Studies and Planning

Adriana Maria Jacobsen

Noah Jefferson McDaniel
Minor in Economics

Bachelor of Science in Urban Science and Planning with Computer Science

Course XI-6

Department of Urban Studies and Planning

Meital Hadassa Hoffman

Hadrian Merced Hernandez

SCHOOL OF ENGINEERING

Bachelor of Science in Engineering as recommended by the Department of Civil and Environmental Engineering

Course 1-ENG
Department of Civil and Environmental Engineering

Foli Giovanni Amaizo
Minor in Computer Science

Darla Earl
Minor in Urban Studies and Planning

Danielle F. Espinosa

Kebar Mosisa Geleta

Viban A. Gonzales
Minor in Earth, Atmospheric, and Planetary Sciences

Zoe Nicole Lallas
Minor in Urban Studies and Planning

Joseph R. Noszek
Minor in Computer Science

Sierra Nicole Rosenzweig
Minor in Business Analytics
Minor in Theater Arts

Amy L. Vogel
Minor in Urban Studies and Planning

Natalie Woods

Bachelor of Science in Mechanical Engineering

Course II
Department of Mechanical Engineering

John Ayooluwa Adeyeye

Alex Aguilar

Marwa AlAlawi

Amro A. Alshareef
Minor in Computer Science

Brandon A. Aranda Ocampo
Also with a Major in Course XXII-ENG
Minor in Economics

Nicolas Arons

Woonyong Bae

Michael A. Castillo
Minor in Management
(February, 2020)

Mateo Correa Aricapa

Neel K. Das

Amy Q. Fang
Minor in Anthropology
Minor in Design

Ryan Maximiliano Flores

Nicholas A. Fritzinger-Pittman

Johnny Z. Fung

Kiera A. Gavin

Albert P. Go

Devon K. Goetz
Also with a Major in Course IX

Andrew H. Griese

Serena C. Grown-Haeberli

Mitchell L. Guillaume
Minor in Computer Science

Henry M. S. Hanlon
Minor in Energy Studies

Luke S. Hartnett
Minor in Energy Studies

Katherine Ann Henshaw
Also with a Major in Course XXI-M

Iris Elizabeth Hwang
Minor in Computer Science

Ahmad Mujtaba Jebran
Also with a Major in Course VI-2
Minor in Nuclear Science and Engineering

Caroline A. Jordan

Max I. Kessler

Chiaki Louise Kirby

Jeevesh Konuru

Margaret Ellen Kosten
Also with a Major in Course XXI-M

Benjamin Kurzban

Serena Le

Cole C. Legg

Allison Lenhard
Also with a Major in Course VI-2

Gabriel K. Li

Jennifer Lu

Mason R. Massie

Megan McCandless

Fiona L. McKellar

Melissa Anna Meloche

Lucy E. Milde
Minor in Environment and Sustainability

Elijah Ballard Miller
Also with a Major in Course XV-3

Harith Morgan

Valerie L. Muldoon
Minor in Energy Studies

Erika P. Mynio

Jeremy R. Noel

Megan E. Ochalek

Sean M. Parks
Also with a Major in Course VIII
(February, 2020)

Ethan B. Perrin

Philip T. Phan

Anya R. Quenon
Minor in Design

Yaseem Rana

Helen Elizabeth Read
Also with a Major in Course XVIII

Jonathan A. Sampson
Minor in Energy Studies

Emily L. Sheng
(February, 2020)

John Joseph Stampfli III

Lisa Tang
Minor in Energy Studies

Srimayi Tenali
Minor in Energy Studies

Carson Isabella Tucker
Minor in Computer Science

Daniel Tortora Wiest
Also with a Major in Course VI-2

Carolynn E. Will
(February, 2020)

Qingmei Wu

Annie Tianci Zhang
Also with a Major in Course IV-B

Kevin Zheng

Lyndie Lee Zollinger

Bachelor of Science in Mechanical and Ocean Engineering

Course II
Department of Mechanical Engineering

Michelle Kornberg
Minor in Music

Madison S. Pickett

Emilio Ochoa Sison
Also with a Major in Course VI-2

Bachelor of Science in Engineering as recommended by the Department of Mechanical Engineering

Course II-A
Department of Mechanical Engineering

Samer A. Awale
Minor in Japanese

Yazan H. Ba'ara

Suji M. Balfe

Maxine D. Beeman
Minor in Theater Arts

Sally Beiruti
(February, 2020)

Emily A. Berzolla

Federico Bescotti
Also with a Major in Course XV-1

Steven C. Browne
Minor in Computer Science

Thi T. Bui

Samuel J. Cantrell
Minor in Business Analytics

Gabriela M. Carrión Rivera
Minor in Management

Hector A. Castillo

Loewen K. Cavill

Jiyoung Chang

Asia Chapman

Claudia Joyce Chen
Also with a Major in Comparative Media Studies

Ali Rami Daher
(February, 2020)

Naomi Dereje

Maxwell Joshua Drake

Bouke K. Edskes
Minor in Physics

Riley J. Ennis
Minor in Spanish

Gabriel A. Evans

Charlotte M. Folinus

Joaquin Sergio Giraldo Laguna
Minor in Design

Danielle K. Gleason

Remi A. Godinez
Also with a Major in Comparative Media Studies

Yi Gong

Benjamin R. Gray
(February, 2020)

Jorge Alejandro Hernandez
(February, 2020)

Raudel Hernandez, Jr.

Nathaniel James Huffman

Valerie Beth Hunter

Samuel H. Ihns

Alden T. James
Also with a Major in Course XXI

Caitlin L. Keegan
Minor in Economics
Minor in Business Analytics

Jameson Clark Kief
Minor in Brain and Cognitive Sciences

S. Violet Killy

Zachary Alexander Kopstein

Dheekshita Kumar
Also with a Major in Course VI-2

Cécile Marie-Josée Leclerc
Minor in Biomedical Engineering

Alyssa Li
Minor in Design

Laura Yun Li
Minor in Design

Weishan Liao

Isabelle Y. Liu
Also with a Major in Course VI-1

Mateo Mariscal

Karla Sofía Martínez Román

Elise McCormack-Kuhman

Lance D. Neil, Jr.
Also with a Major in Course VIII

Heather Marie Nelson
Minor in Design

Thomas R. Nelson

Alexandrine Obrand

Rana E. Odabas

Rachel M. O'Grady

Katharine Pan
Minor in Management

Serena Pan
Minor in Science, Technology, and Society
(September, 2019)

Alexander Rajan Patton

Elizabeth Marie Barna Pedlow

Isaac S. Perper
Also with a Major in Course VI-2
Minor in Economics

Francisco A. Pineda

Felipe Radovitzky

Matthew J. Reeve

Alvaro Rivera

John Farrar Robertson
Minor in Management

Kevin T. Rodriguez
(February, 2020)

George Imre F. Roudebush
(February, 2020)

Abenezer Samuel

Booker B. Schelhaas
Minor in Spanish

Israel J. Sosa
Minor in History

Dorothy Szymkiewicz

Daniel A. Taylor
Also with a Major in Course XIV-1

Benjamin R. Teitscheid

Gustavo F. Torres

Claire M. Traweek
Minor in Russian and Eurasian Studies

Raymond S. Tse

Ana María Vargas
Minor in Literature
(February, 2020)

Sandra L. Walter
Minor in Music

Tessa Nicole Weiss

Olivia J. Yao

Bachelor of Science in Materials Science and Engineering

Course III
Department of Materials Science and Engineering

Bilal Azhar
Also with a Major in Course VIII

Maya Rebekah Berlinger

Gloria Un Chyr
Minor in Japanese

Kyle Pearce Dominguez
Minor in Mechanical Engineering

Claire E. Halloran
Minor in Public Policy
Minor in Energy Studies

Maia H. Hannahs
Minor in Physics

Carolyn K. Jons
Minor in Chinese

Talia M. Khan
Also with a Major in Course XXI-M

Omar A. Laris

Cíara Renee Mulcahy

Babatunde O. Ogunlade

Seeta Salgia Patel
Minor in Economics
Minor in Energy Studies

Pooja Donthi Reddy

Caleb Richardson

Kevin Alfredo Santillan Hernandez

Cindy H. Shi
Minor in Polymers and Soft Matter

Vivian Song

Sara Laura Wilson

Michelle Wist

Bachelor of Science as recommended by the Department of Materials Science and Engineering

Course III-A
Department of Materials Science and Engineering

Anthony Lu Cheng
Minor in Computer Science
Minor in Energy Studies

Yi Jung Choi
Minor in Political Science

Megan E. Diehl

Connor Dotson
Minor in Finance

Yiran S. He
Also with a Major in Sci., Tech., & Society

Sofia A. Lobo Kemp
Minor in Management

Isaac W. Metcalf
Also with a Major in Course VIII

Thomas Eismann Urquhart
Minor in Public Policy

Hilary Sophia Vogelbaum

Bachelor of Science in Electrical Science and Engineering

Course VI-1
Department of Electrical Engineering and Computer Science

Roderick Sterndale Bayliss III
(February, 2020)

Timothy Justin Cardona
Also with a Major in Course VIII

Benjamin Gus Cary

Ryan J. Catalano

Rhian A. Chavez
Minor in Physics

Michael D. DeTienne
(February, 2020)

Adam B. Estes
Minor in Ancient and Medieval Studies

Emmanuel Havugimana

Savannah N. Inglin

David Mejorado III

Yukimi Morimoto

Elizabeth Katherine Murray
Minor in Applied International Studies

Suzanne O'Meara
(See also M.Eng., Course VI-P)

Alexander D. Reduker

Jeremy C. Sogo
Also with a Major in Course XXI-M

Elijah B. Stanger-Jones

Bachelor of Science in Electrical Engineering and Computer Science

Course VI-2
Department of Electrical Engineering and Computer Science

Vibha Agarwal
Minor in Biomedical Engineering

Elaheh Ahmadi

Harrison M. Allen

Kika A. Arias

Katharine E. Bacher

Matthew J. Beveridge
Also with a Major in Course XVIII
Minor in Theater Arts

Eric P. Boehlke

Andrea A. Bolivar Matos

Akhilan Boopathy

Connor P. Bradley

Alexis Camacho

Wei Chen
(February, 2020)

Samuel C. Cherna

Peter B. Crocker

Jiaming Cui

Shiloh Serenity Sigrid Curtis

Miles J. Dai

Gian C. Delfin

Alexander Dimitrakakis
Also with a Major in Course XVIII
Minor in Economics

Anis M. Ehsani
Minor in Mathematics

Mahalaxmi Elango

Yu Liang Fang
Also with a Major in Course XVIII
Minor in Economics

Jini A. Gabbidon
Minor in Music
(February, 2020)

Daniel G. Gonzalez Cunningham

Alexander G. Grossman
(See also M.Eng., Course VI-P)

Benjamin D. Gutierrez
Minor in Mechanical Engineering
Minor in Mathematics
(February, 2020)

Chessa N. Hoekstra

Kayla A. Holman
Minor in Mechanical Engineering

Eva H. Hu

Angel Huang

Ruixue Louisa Huang

Vivian Huang

Nada Hussein

Yow Shiuan Hwang
Minor in Energy Studies

Alexa L. Jan
Minor in Spanish

Mumin Jin

Sule Kahraman
Minor in Statistics and Data Science

Natnael K. Kahssay

Wonjune Kang
Minor in Economics
Minor in Mathematics

Tamer Karatekin

Sean J. Kent

Quang Phuc N. Kieu

Grayson C. King
Also with a Major in Course VIII

Alon Z. Kosowsky-Sachs

Paula Lahera
(February, 2020)

Ronit N. Langer
Minor in Public Policy
(February, 2020)

Lukas C. Lao Beyer
(February, 2020)

Pavle Lazarević
Also with a Major in Course XVIII
Minor in Economics

Lesian E. Lengare

Dylan Robert Lewis

Jenny Li

Po-Han Lin
Also with a Major in Course XX
Minor in Biology
Minor in Finance

Patricia J. Lu
Minor in Statistics and Data Science

Kara F. Luo
Also with a Major in Course XVIII
(February, 2020)

Gabriel A. Madonna

Chenkai Mao
Also with a Major in Course VIII
Minor in Mathematics
Minor in Music

Dylan J. Marlborough

Shana Mathew

Francis E. McCann Ramirez

Haripriya P. Mehta
Minor in Music
(See also M.Eng., Course VI-P)

Michele Q. Miao

Daniel R. Monagle

David Morejon
Minor in Economics

Tyler Lawrence Moroso

Noah F. Moroze

Andre J. Mroz

Joshua Eron Noel

Ian A. Palmer

Shannon S. Peng
Minor in Theater Arts

Emanuel Perez

Ignacio Perez Bedoya
Also with a Major in Course VIII
Minor in Mathematics
Minor in Music
(See also M.Eng., Course VI-P)

Ashisha N. Persad

Phoebe K. Piercy

Zachary J. Pitcher

Jacob W. Pritzker

Jessica A. Quaye

Ravi Rahman
Minor in Mathematics
Minor in Management

Raja William Rajčić

Kavya Ravichandran
(See also M.Eng., Course VI-P)

Sushrutha P. Reddy
Minor in Physics
Minor in Mathematics

Premila Ann Rowles

Benjamin G. Rowley

Jonathan Samayoa

Ryan M. Sander
Also with a Major in Course XIV-2

Jeba Sania
Minor in Brain and Cognitive Sciences

Kristin Marie Sheridan
Minor in Spanish

Ryan M. Shubert

Tanya N. Smith
Minor in Japanese

Máiréad M. Solvang

Logan S. Stafford

Sophia E. Struckman

Lydia Y. Sun

Virginia Sun

Jade N. Talley

Luis Terrones-Verástegui

Luis Edgardo Torres Rodríguez

Peter T. Tran
Also with a Major in Course VIII

Elizabeth A. Truchan

Matthew C. Tung

Samuel Lee Ubellacker
Minor in Mechanical Engineering

Francisca Vasconcelos
Also with a Major in Course VIII

Julie Renee Vaughn
Minor in Biomedical Engineering

Héctor Javier Vázquez Martínez

Benjamin T. Wang

Yi Wang

Ethan J. Weber

Quentin Wellens

Daniel A. Whatley

Martin T. Winton

Daniel R. Wrafter
Minor in Mathematics
(February, 2020)

Priscilla Joy Wu

Byron L. Xu

Adil Yusuf

Catherine Yue Zeng

Franklin Zhang
Minor in Mechanical Engineering

Bachelor of Science in Computer Science and Engineering

Course VI-3
Department of Electrical Engineering and Computer Science

Marwa Abdulhai

Madeline L. Abrahams
Minor in Women's and Gender Studies

Kenneth Kofi-Abaka Acquah
Also with a Major in Course XIV-2

Katherine Elizabeth Adams

Shahul Alam
Minor in Mathematics

Max G. Allen II

Alhamzah S. Alnufaili
Minor in Mathematics

Christian Omar Altamirano Modesto
Also with a Major in Course XVIII

Angel G. Alvarez II

David James Amirault
Also with a Major in Course XVIII
(See also M.Eng., Course VI-P)

Andrew R. Antonitis

Md Sanzeed Anwar
Minor in Mathematics

Ersin Arioglu
Minor in Economics

Michael Christopher Arrington

Lily Sierra Bailey

Jamarber Bakalli
Also with a Major in Course XXI-W

Cole S. Baker
Minor in Brain and Cognitive Sciences

Brandon J. Baraban
Minor in Mathematics
Minor in Music
(See also M.Eng., Course VI-P)

Damian S. Barabonkov

Avital Franka Baral
Also with a Major in Course XI

Remy Bassett-Audain

David A. Bau IV
Also with a Major in Course XVIII

Keis Bejgo

Eden Bensaid
Minor in Mathematics

Jackson R. Bernatchez

Mateus Bezrutchka
Also with a Major in Course XVIII
(February, 2020)

Ramakrishnamurthi Bhaskaramurthi
(September, 2019)

Darian Bhathena
Minor in Biomedical Engineering

Darius A. Bopp

Luke R. Bordonaro

Eric Mahathvan Bradford
(February, 2020)

Cameron R. Burnett

Emily Y. Cai
Also with a Major in Course XVIII

Lujing Cen
Minor in Mathematics

Rishabh U. Chandra
Minor in Political Science
Minor in Statistics and Data Science

Hannah Y. Chang

Andrew L. Chen

Baian Chen

Kevin Chen
Minor in Economics

Melanie Ronghsuan Chen
Minor in Mathematics

Leon Cheng

Victor Bo-Wei Cheng

Rowan T. Cheung

Rayden Yongxiang Chia
(February, 2020)

Seri Choi

Won Suk Choi

Jeff T. Chow

Jakub Chudik

Raven Arrow H. Clayborn

Joanna Kim Cohen

Jeremy Charles Cowham

Van R. Coykendall

Robert C. DeLaus

Andrew Thomas Delgadillo

Alenta Demissew
Minor in Mathematics
Minor in Music

Kenneth A. Derek

Maurizio Alfredo Diaz

Tony Ding

Serena N. Do
Minor in Music

Shannon E. Duffy
Minor in Music

Murielle Dunand

Ramya A. Durvasula
Also with a Major in Course XVIII

Joshua A. Elbahrawy

Jonathan E. Esteban Díaz
(February, 2020)

Andrés Fábrega Gerbaud
Minor in Mathematics

Amir Farhat

Selena C. Feng

Juan Angelo Ferrúa Elmúdesi
Also with a Major in Course XV-1

Julia M. Fiksinski
Minor in Music

Diana J. Flores

Nathan Foss
Minor in Mathematics

Sanjay Ganeshan

Jiyang Gao
Also with a Major in Course XVIII
Minor in Japanese

Juan Carlos Garcia
Also with a Major in Course XXI-M
(February, 2020)

Rene A. Garcia

Bamlak Gessessew
Minor in Political Science

Yianni Giannaris

Julian R. Gomez

Nicolás Gómez del Campo

Linda Zhiya Gong
Minor in Mathematics

Armaan V. Gori

Rachel A. Green

Taylor Anne Grey

Jada Rosaria Griffith
Minor in Theater Arts

John Michael Grosen
Minor in Mathematics

Katharina Valentina Gschwind

Ishaan Gulrajani

Adam Robert Gumbardo

Daniel Guo
Also with a Major in Course XVIII
(February, 2020)

Xiaolu Guo

Arjun R. Gupta
(See also M.Eng., Course VI-P)

Deepankar Gupta
Also with a Major in Course XVIII

Jasper F. Haag

Jonathan S. Harvey Buschel
(February, 2020)

Helen M. He

Joshua Ryan Hilke

Cole R. Hoffer

Zachary Nolan Holbrook
Minor in Economics
Minor in Mathematics
(February, 2020)

Daniel I. Hong

Claire C. Hsu

Emily D. Hu
Minor in Music

Stephanie M. Hu
Also with a Major in Course IX

Matthew S. Hutchinson
Minor in Political Science
(See also M.Eng., Course VI-P)

Andrea Jessica Jaba

Satvat Jagwani
Minor in Mathematics

Shreyan Jain
Minor in Literature
(See also M.Eng., Course VI-P)

Soo Jung Jang

Nicholas William Janovetz

Roger Shi Jin
Also with a Major in Course XVIII
Minor in Biology

Benjamin S. Johnson
Minor in Writing

Cory M. Johnson
(February, 2020)

Ivan C. Jutamulia
Minor in Statistics and Data Science

Nicolaas M. Kaashoek

Endrias K. Kahssay

Michael L. Kaminsky

Shreyas Kapur

Sai Veda Pramoda Karnati
Minor in Biomedical Engineering

Madlyn H. Kates
Minor in Art, Culture and Technology

Dain Kim

Jeffrey Ji-Ho Kim

Spencer Michael Kim
(February, 2020)

Joonho Ko

Elorm Kofi Koto
(February, 2020)

Tim Kralj
Minor in Philosophy

Vedaant Paul Kukadia

Michael A. Kulinski

Agni Kumar
Also with a Major in Course XVIII
Minor in Economics
(See also M.Eng., Course VI-P)

Grace Sally Lam

Jason Lam
Also with a Major in Course XV-1
(See also M.Eng., Course VI-P)

Avery B. Lamp
Also with a Major in Course XV-1

Allen J. Lee
(September, 2019)

Jinny Lee
Minor in Japanese

Madison H. Lee

Ariel Skye Levy
Minor in Mathematics

Amanda D. Li
(February, 2020)

Helen Li

Jeffrey Z. Li
(September, 2019)

Lawrence L. Li

Lucy Li

Wilbur Yone Li
Minor in Mechanical Engineering

Yanlin Li
Minor in History

Kun Lin

Xu Lin

Sonja Camilla Lindberg
Minor in French

Cynthia Tianqing Liu
Also with a Major in Course XVIII

Jessica Liu

Nanxi Liu

Tara Liu
Also with a Major in Comparative Media Studies

Ricardo A. Lopez
(February, 2020)

Sophia Y. Luo
Also with a Major in Course XIV-2
(See also M.Eng., Course VI-P)

Cory J. Lynch
Minor in Japanese

Cowboy R. Lynk

Kevin A. Lyons

Shane H. Lyons

Jingwei Ma

Creshendo A. Maccow
Minor in Management

Loren Rose Maggiore
Minor in Mechanical Engineering

Emily Marie Malison

Christopher Glendon Matthew Mauck

James E. McGaa
Minor in Mathematics

Jasmine C. McGhee
(February, 2020)

Jocelyn C. McGhee
(February, 2020)

Albert N. Menio

Enrico Joseph Micali

Tyler J. Millis

Felipe Monsalve
Also with a Major in Course XIV-2

Jack S. Moore
Minor in Music

Christian Thomas Moroney

Sanjeev R. Murty
Also with a Major in Course XVIII

Urmi Mustafi

Moin Nadeem
(February, 2020)

Ramya Nagarajan

Molly M. Nagele
(February, 2020)

Audace Nakeshimana
Minor in Economics

Ajinkya Kishore Nene
(See also M.Eng., Course VI-P)

Diana Nguyen

Trân Bảo Nguyễn

Juan M. Ochoa Ortiz
Minor in Mathematics

Adelaide Robyn Oh
Also with a Major in Course XVII

Santiago Ospina

Simran K. Pabla
Minor in Mathematics

Gregory M. Pailet
Minor in Mathematics

Tiffany E. Pan
(February, 2020)

Russell Anthony Ramos Pasetes
Also with a Major in Course XXI-M

Sheel V. Patel

McCoy A. Patiño Middaugh

DaMarcus D. Patterson
Also with a Major in Course XVIII

Jason G. Paulos
(See also M.Eng., Course VI-P)

Srijith Sreekumar Poduval
(See also M.Eng., Course VI-P)

Lilia Poteat

Collin L. Potts
Also with a Major in Course XVIII

Arul Ray Prasad
Also with a Major in Course XVIII

Neha Prasad
Also with a Major in Course XVIII

Tiancheng Qin
Also with a Major in Course XVIII
Minor in Music

Sunayana Rane
(See also M.Eng., Course VI-P)

Christopher James Reilly

Anthony J. Rice

Yaateh H. Richardson
Minor in Music

Humberto Riverón Valdés

Nicolas H. Rodriguez

Xavier Roman

Isak Romero

Brennan H. Rosales

Linnea J. Rylander

Roshni Sahoo
Also with a Major in Course XVIII
Minor in Literature

Steven G. Salvas

Brent C. Samuels

Nilai M. Sarda
Minor in Mathematics
(See also M.Eng., Course VI-P)

Sarbari Sarkar
Minor in Statistics and Data Science
(See also M.Eng., Course VI-P)

Lauren Schexnayder
Also with a Major in Course IX
Minor in Music

Gabriel Joseph Schneider

Theodoros Sechopoulos
Minor in Mathematics

Jason Lee Seibel

Kliment Serafimov

Vlad Şeremet

Karunya Anantha Sethuraman

Rishi Nilesh Shah
Minor in Brain and Cognitive Sciences
Minor in Political Science

Ellen Victoria Shea
Minor in Japanese

Sean Shi

Luke Shimanuki
Also with a Major in Course IX
Minor in Mathematics
(See also M.Eng., Course VI-P)

Oleksandr Shumaiev
Also with a Major in Course VIII
Minor in Mathematics
Minor in Statistics and Data Science

Michael Sol Silver

Sanja Simonovikj

Prachi Sinha

Arlene Elizabeth Siswanto
Minor in Mathematics

Christabel J. Sitienei
(February, 2020)

Cel Andromeda Skeggs

Christine Soh
Also with a Major in Course XXIV-2

Anna L. Song

Trevor Spreadbury
Minor in Mathematics

Aditi H. Srinivasan

Colton G. Stearns

Patroklos N. Stefanou

Mariia Stepaniuk

Rex A. Stockham II

Aramis A. Subee

Daniel Xu-Feng Sun
Also with a Major in Course XVIII

Kevin Sun

Rishi S. Sundaresan
(See also M.Eng., Course VI-P)

Arman J. Talkar

Michelle Tan
Minor in Music

Kentaro Tanaka
(February, 2020)

Ayobamidale T. Taylor

Nicole Dawson Thumma

Sunny Tian
(See also M.Eng., Course VI-P)

Steven R. Timberman

Charles S. Tonneslan

Madelyn E. Torres

Carlos D. Treviño

Andy Tso
Minor in Statistics and Data Science

Tenzin S. Ukyab
Minor in Philosophy

Prithvi N. Undavalli

Mayukha Suhasini Vadari

Abhiti G. Vaish
Minor in Economics

Miguel Vega

Rohil Verma

Stuti Vishwabhan

Suchan Vivatsethachai
Also with a Major in Course XVIII
Minor in Statistics and Data Science
(February, 2020)

Robert Mugisha Vunabandi

Annie Wagner
(February, 2020)

Austin Taylor Wang
(See also M.Eng., Course VI-P)

Brice Libai Wang

Charleen Wang

Crystal Wang
Minor in Mathematics

Daniel A. Wang

Meryl S. Wang

Rose Elizabeth Wang

Xiaoyi Wang
Minor in Economics
Minor in Mathematics

Yingni Wang
Also with a Major in Course XVIII
Minor in Finance

Chase Jervis Joseph Warren

Mattie F. Wasiak
(See also M.Eng., Course VI-P)

Ryan L. Welch
(February, 2020)

Erica X. Weng

Jesse Alan Widner

Christien S. Williams

Matthew E. Woicik

Eyob W. Woldeghebriel
Minor in Brain and Cognitive Sciences

Priscilla Y. Wong
(February, 2020)

Alice Selina Wu

Julia Wu
(February, 2020)

Nanette Wu
Also with a Major in Course XXI-M

Justin Hu Xiang
Minor in Finance

Brian B. Xie

Adela Y. Yang
Also with a Major in Course XVIII

Alexander Y. Yang

Katherine Shulin Yang
Minor in Comparative Media Studies

Stella Lan Yang
(February, 2020)

Su Yang

Tiffany Yang

Yejin You
Also with a Major in Course XVIII

Yuancheng Yu
Also with a Major in Course XVIII

Dillon Zhang
Minor in Theater Arts

Elaine Zhang

Emily T. Zhang
Minor in Mechanical Engineering

Madeline Manlin Zhang
(February, 2020)

Ruowang Zhang

Zhaoyuan Zhang
(February, 2020)

Tianlin Zheng
Minor in Finance

Jessica F. Zhu

Yunyi Zhu
Minor in Design

Yuqing Zhu
Also with a Major in Course XVIII
Minor in Economics

Bachelor of Science in Computer Science and Molecular Biology

Course VI-7
Department of Electrical Engineering and Computer Science

Emma A. Bernstein
Minor in Ancient and Medieval Studies

Kristy Amé Carpenter

Joshua T. Derrick
Also with a Major in Course XXI-W

Camille X. Devoe

Barış Can Ekim
Also with a Major in Course XVIII

Karen Gu
Minor in Linguistics
Minor in Statistics and Data Science

Fatima M. Gunter-Rahman

Kendyll Nicole Hicks

Eileen Hu

Sam Seunghun Lee
(February, 2020)

Aman S. Patel
Minor in Statistics and Data Science
(February, 2020)

William Phu

Montana F. Reilly
Minor in Literature

Venkatesh S. Sivaraman
Minor in Music

Cassia Bethany Wang
Minor in Music

Lawrence C. Wong
Minor in Statistics and Data Science

Kelly Zhang
Minor in Music

Bachelor of Science in Computation and Cognition

Course VI-9
Department of Electrical Engineering and Computer Science

Melat R. Anteneh

Mariana Gomez del Campo

Hang Le Thi Nguyet

Steven C. Speck

Bachelor of Science in Computer Science, Economics, and Data Science

Course VI-14
Department of Electrical Engineering and Computer Science

Sarah Racquel Antiles
Minor in Finance

Ariel Brito

Julia Castiglia
Minor in Business Analytics

Amanuael Gebregziabhere Gidey
Minor in Business Analytics

Benjamin Philip Gruber

Tianyun Gu

Emily Minsoh Kim

Stephanie D. Li
Minor in Music

Elton Lin
Minor in Mathematics

Thee Ngamsangrat

Adedoyin Adenike Abimbola Olateru-Olagbegi

Veronica J. Ripper

Albert D. Roberts III

Maya Leung Roy
Minor in Mathematics

Cindy Wenhui Si
Minor in Anthropology

Lilia R. Staszel

Kenny JH Yang

Bachelor of Science in Chemical Engineering

Course X
Department of Chemical Engineering

James Cao

Connor Chung

Juan Sebastian Esquivel Gutierrez

Michal L. Gala
Minor in Computer Science

Conrad E. Goffinet
Minor in Economics
Minor in Computer Science

Kristina Anne Greenwood

Kaitlyn Arminda Hennacy

Kedi Hu
Also with a Major in Course IV

Kaleigh Elizabeth Hunt
Also with a Major in Course XXI-G

Kyle B. C. James

Mofoluwaso S. Jebutu

Kelvin Kyle Jones
Minor in Economics

Hannah J. Loizzo
Minor in French

Ziad Mansour
Also with a Major in Course XVIII

Jennifer Chibuanuri Nwenyi
Minor in Materials Science and Engineering

Watchara Pep Ouysinprasert
Minor in Finance

Crystal Pham
Minor in Business Analytics

Christian Antonio Sanchez
(February, 2020)

Daniel Shipchandler
(February, 2020)

David Linwood Silverstein
Minor in Economics

Philip Khiem Tran

Johan Steven Villanueva Gutierrez

Junyu Yang
Also with a Major in Course V

Liruonong Zhang
Minor in Management

Bachelor of Science in Chemical-Biological Engineering

Course X-B
Department of Chemical Engineering

Jenna K. Ahn
Minor in Computer Science

Delaney Marie Burns
Also with a Major in Course VII

Cindy Chen

Xingyu Chen

Dana B. Dabbousi
Minor in Biology
Minor in Entrepreneurship & Innovation

Samantha Johanna Fletcher
Minor in Literature

Fernando A. Juarez

David A. Poberejsky
Also with a Major in Course VI-7

Gianna Yvonne Reza-Ortega
Also with a Major in Course VII

Audrey Beth Ricks

Crystal Y. Tsui
Also with a Major in Course VII

Bachelor of Science in Engineering as recommended by the Department of Chemical Engineering

Course X-ENG
Department of Chemical Engineering

Jordan L. Alford
Also with a Major in Course XXI-G

Nathanael Assefa
Also with a Major in Course XVIII
Minor in Literature

Ashton St. Clair Dacon
Minor in Computer Science

Stephen Anderson Duncan

Anjolaoluwa Adebola Fayemi
Minor in Theater Arts

Julia L. Pallone

Elyse A. Paneral

Bachelor of Science in Aerospace Engineering

Course XVI
Department of Aeronautics and Astronautics

Marcus Salvatore Abate

Samuel Patrick Austin

Brent Alberto Avery
Minor in Economics

Mary Katherine Brewer
Minor in History

Humberto L. Caldelas II

Matthew C. Campbell
Minor in Japanese

Kevin C. Carlson
Minor in Political Science

Kathleen M. Clark

Jakob Edward Coray

Mary Dahl
Minor in Writing

Jad A. Elmourad
Also with a Major in Course VIII
Minor in Theater Arts

Thomas Edward Finn

Alexandra Mae Forsey-Smerek

Aigneis Ambrose Frey

Carlos Rafael Garcia
(February, 2020)

Madeline K. Garcia

Timothy J. Glinski
Minor in Japanese

Sarah Margaret Gonzalez
Minor in Literature

Kelton C. Hardrict, Jr.

Timmy A. Hussain
Minor in Management

Jim Matthew Koldada

Raul Alexander Largaespada
Also with a Major in Course VI-2

Mia J. LaRocca
Minor in Music

Jonathan Edwards Ledet

David Raymond Mueller
Also with a Major in Course VI-2
(February, 2020)

Ethan T. Munden

Alexander I. Peraire-Bueno
Also with a Major in Course VI-2

Daniel Nathan Pickard
Minor in Mathematics

Thomas S. Rick
Minor in Political Science

William Beau Rideout
(September, 2019)

Felipe Roz Barscevicius

Tina Tran

Michelle Xu
Minor in Japanese

José Miguel Zavala González

Bachelor of Science in Engineering as recommended by the Department of Aeronautics and Astronautics

Course XVI-ENG
Department of Aeronautics and Astronautics

TojumiOluwa Sijibomi Adegboyega

Nicholas L. Bain

Diego Nicolas Barea

Alex Chat Tung Choi

Hunter Stan Fields
Minor in Economics
Minor in Finance

Sean A.J. Gloumeau

Christopher L. Hughes
Also with a Major in Course VI-2

Abigail J. Lee
Minor in Computer Science

Jacqueline F. Liao
Minor in Computer Science

Gabriel B. Margolis
Also with a Major in Course VI-2

Claire M. McGinnity

Kyle Jared Morgenstein
Also with a Major in Course XII

Mohammed N. Nasir

Juan Alejandro Salazar
Also with a Major in Course VI-1

Ryan Riley Scerbo

Madeleine R. Schroeder

Tesla Wells

Joanna A. Zhang

Bachelor of Science in Biological Engineering

Course XX
Department of Biological Engineering

Masrur S. Alam

Andres D. Alvarado
Minor in Japanese

Andrés Álvarez
Minor in Business Analytics

Adrianna E. Amaro
Minor in Theater Arts

Christina K. Bray
Minor in Literature

Shin Chang
Minor in Music
Minor in Design

Sharon J. Chen
Minor in Economics
(February, 2020)

Rebekah M. Costello
Minor in Political Science

Izumi C. de los Rios Kobara

Linyue Fan
Minor in Computer Science

Joseph S. Faraguna

Andrea Garmilla

Ning Guan
Minor in Economics
Minor in Mathematics

Ayse Angela M Guvenilir
Minor in Writing

Aya Grace Halawi

Bárbarah Cavalcanti Heimer
Minor in Computer Science

Shea Annelise Landeene
Minor in Brain and Cognitive Sciences

Alice Lin
Also with a Major in Course IX

Leanne Lin
Minor in Mathematics

Sally Liu

Abigail V. McGee

Marissa L. McPhillips
Minor in Writing

Jenna Bryn Melanson
Minor in Literature

Santiago Munoz Perez

Nia O. Myrie

Domenic N. Narducci

Cathy Phan Nguyen
Minor in Spanish

Benjamin J. Oberlton

Athena I. Ortega

Kristen Elizabeth Overly

Cecilia Padilla

Julia L. Pei

Giselle A. Peng

Zion Ruth Perry

William B. Pinney III

Imon Rahaman
Minor in Mathematics

Divya Ravinder

Emily S. Ryeom

Michelle N. Sanchez

Natasha Marie Stark

Yotaro Sueoka
Also with a Major in Course IX
Minor in Physics
Minor in Computer Science

Melody C. Tan

Steven D. Truong
Also with a Major in Course XXI-W

Kayla Nicole Vodehnal
Minor in Brain and Cognitive Sciences

Nina Wang

Alexandra Elizabeth Werner
Minor in Science, Technology, and Society

Cydney Alexandra Wong
Minor in Women's and Gender Studies

Nova Xu
Minor in Music

Yue Zhong

Bachelor of Science in Nuclear Science and Engineering

Course XXII
Department of Nuclear Science and Engineering

Alexandru D. Calburean
(February, 2020)

Eva Morgan Lisowski

Warner A. McGhee
Minor in Mechanical Engineering

Jacob N. Miske
Also with a Major in Course II-A
Minor in Energy Studies

Thomas John Strei III
Minor in Public Policy

Bachelor of Science in Engineering as recommended by the Department of Nuclear Science and Engineering

Course XXII-ENG
Department of Nuclear Science and Engineering

Colt S. Hermesch
Minor in Economics

Benjamin R. Sheffer
Also with a Major in Course VIII

SCHOOL OF HUMANITIES, ARTS, AND SOCIAL SCIENCES

Bachelor of Science in Economics
Course XIV-1
Department of Economics

Michelle A. Bai
Also with a Major in Course XVII
Minor in Energy Studies

Hanna W. Kherzai
Minor in Writing

Sydney A. LaPorte

Ignacio Ortega Castineiras
Minor in Mechanical Engineering
Minor in Energy Studies

Spencer D. Pantoja
Also with a Major in Course XVIII

Jack Philip Abraham Spira

Hin Nok Oscar Suen

Bachelor of Science in Mathematical Economics
Course XIV-2
Department of Economics

Tina Pavlovich
Minor in Spanish
(February, 2020)

Bachelor of Science in Political Science
Course XVII
Department of Political Science

Frances Caroline Parker-Hale
Minor in Biology

Sarah Benette Powazek
(February, 2020)

Kaitlin Aria Tucci
Also with a Major in Course XV-1

Bachelor of Science in Anthropology
Course XXI-A
Program in Anthropology

Kayla A. Tabb

Bachelor of Science in Global Studies and Languages
Course XXI-G
Global Studies and Languages

Sarah Margaret Owen

Bachelor of Science in Writing
Course XXI-W
Program in Writing and Humanistic Studies

Hannah Michaye Ledford

Bachelor of Science in Humanities and Engineering
Course XXI-E
Department of Humanities

Allan Gelman

Danny Gelman

Emily Elliott Grey

Rachel N. Groberman

Robert C. Henning

Katherine Gar-Ling Yee

Bachelor of Science in Humanities and Science
Course XXI-S
Department of Humanities

Karina I. Hinojosa

Jamison Rich

Bachelor of Science in Philosophy
Course XXIV-1
Department of Linguistics and Philosophy

Brian C. Bates

Joseph D. Edwards

Matisse Catherine Peppet
Also with a Major in Course XVIII

Bachelor of Science in Linguistics and Philosophy
Course XXIV-2
Department of Linguistics and Philosophy

Margarita Misirpashayeva
Also with a Major in Course XVIII-C

Bachelor of Science in Comparative Media Studies
Program in Comparative Media Studies

Joanna J. Gerr
Also with a Major in Course VI-3

Anthony Hernandez
Also with a Major in Course VI-3

Brianna E. Igbinosun
Minor in Computer Science

Jessica Y. Tang
Minor in Computer Science

SLOAN SCHOOL OF MANAGEMENT

Bachelor of Science in Management
Course XV-1
Sloan School of Management

Mati K. Alemayehu
Minor in Computer Science

Massimo Augustine

Melissa Cao
Minor in Music

Marielle J. Folan

Luis Hong Sanchez

Maël J. Le Scouëzec

Theresa T. Lo

Andrew Christopher Lu
Also with a Major in Course XIV-1

Nicholas R. Martin
(February, 2020)

Nwanacho U. Nwana
Also with a Major in Course XVII

Kevin Robert Petrovič

Rebecca Hyun-ji Shin
Also with a Major in Course XIV-1

Marissa Steinmetz
(February, 2020)

Christopher M. Washington

Alice Zhou
Minor in Biology

Bachelor of Science in Business Analytics
Course XV-2
Sloan School of Management

Aidan James Einloth
Minor in Political Science

Liam D. Fenlon
Minor in French

Charles J. Nodus
Minor in Computer Science

Ethan Adam Oak

Willem Laurens Reerink
(February, 2020)

Ricardo D. Villarreal

Aidan N. Westley
Minor in Computer Science

Bachelor of Science in Finance
Course XV-3
Sloan School of Management

Thomas Insuh Cho

Kelly A. Craig
Minor in Political Science
(September, 2019)

Aubrey T. Grimshaw
Also with a Major in Course XIV-2

Alexis N. Groark
Also with a Major in Course II-A

Brandon E. Kramer

Ato Kwapong
Minor in Computer Science

Ming Liu
Also with a Major in Course VII-A
Minor in Political Science

Vick Cheung Liu

John Conover Reece III

Simran A. Vaidya
Minor in Spanish

Joseph R. Vasile
Also with a Major in Course XIV-1

Carol Sophia Wu
Minor in Statistics and Data Science

Gabriella Maria Zak
Minor in Mathematics
Minor in Literature

SCHOOL OF SCIENCE

Bachelor of Science in Chemistry
Course V
Department of Chemistry

Alexander Igor Alabugin

Antonio M. Buscemi
(February, 2020)

Gabriela Cazares
Minor in Environment and Sustainability

Erica Jillian Flear
Minor in Ancient and Medieval Studies

Aria M. Fodness

Darnell Scott Granberry, Jr.
Also with a Major in Course VI-3

Erin Elizabeth Grela
Also with a Major in Course XIV-1

Christopher Gerald Hillenbrand
Also with a Major in Course XVIII
Minor in Physics
(February, 2020)

Priscilla Liow
Minor in Mathematics
Minor in Music

Elyse Plachinski

Rebecca Ann Sloan

Ruth Rosegrant Tweedy
Also with a Major in Course XII

Bachelor of Science in Chemistry and Biology
Course V-7
Department of Chemistry

Miguel Angel Aguilar Ramos

Karen V. Camacho
Minor in Russian and Eurasian Studies

Valentina Y. De La Rosa
(February, 2020)

Madeleine Celia Kline
Minor in Spanish

Chun-Ting Liu
(February, 2020)

Lynn Yuying Liu
Minor in Spanish

Tafara L. Mashanda

Claire M. O'Callaghan

Samuel A. Solomon
Also with a Major in Course VIII
Minor in Nuclear Science and Engineering

Leon Ho Yim

Sherry X. Zhou
Minor in French

Bachelor of Science in Biology
Course VII
Department of Biology

Muskaan Aggarwal
Minor in Ancient and Medieval Studies

Brigid Mary Bane
Minor in Chemistry

Crystal Tin-Tin Chang

Julia Hayoung Cho

Lauren C. Clamon
Also with a Major in Course XXI-L

Christopher John Copeland

Mariam E. Dogar
Minor in Urban Studies and Planning

Joseph Raymund Baniquett Espiritu

Trevor E. Ewald

Hayley M. Flores
Minor in Public Policy

Apolonia Gardner
Also with a Major in Course IX
Minor in Chemistry
Minor in Biomedical Engineering

Cynthia A. Harris

Allison Catherine Huske
Minor in Literature

Swarna Kushmanda Anjanita Jeewajee

Grace Yukiko Kuffner
Also with a Major in Course XXI-M

Evan Remy Lang

Laura Z. Liao
Minor in Women's and Gender Studies

Kyra V. Majors

Leah K. McKinney
Minor in Ancient and Medieval Studies

Maia Mesyngier
Minor in Biomedical Engineering

Hayden G. Niederreiter
Minor in Business Analytics

Taiylor Renae Nunn

Amanda P. Putnam
Minor in Public Policy

Anan Quan

Rachel R. Rock
(February, 2020)

Yhiedania Santiago

J. L. Shelly
Minor in Entrepreneurship & Innovation

Candace Tong-Li
Minor in Brain and Cognitive Sciences
Minor in Literature

Edward Joseph Weldon IV

Fei Yu
(February, 2020)

Bachelor of Science in Physics
Course VIII
Department of Physics

Ibrahim M. Alnami
(September, 2019)

Vilhelm Lee Andersen Woltz
Also with a Major in Course VI-2
Minor in Mathematics

Anuj Apte
Also with a Major in Course XXIV-1
Minor in Mathematics
Minor in Music

Siranush Babakhanova
Minor in Computer Science

Emma K. Batson
Also with a Major in Course VI-1

Jacob Joseph Benoit
Minor in Finance

Anoushka R. Bose
Also with a Major in Course XVII

Jonathon Steffon Brown

Dylan Matias Carranza
Minor in Mathematics
Minor in Computer Science

Eric R. Chen
Also with a Major in Course VI-2

Allen Cheng
Also with a Major in Course XIV-2

Tatsuya Warren Daniel
Minor in Mathematics
Minor in German

James Barrie Drabble

Brandon Epstein
Also with a Major in Course XVIII

Hannah Margaret Field
Also with a Major in Course VI-2

Sophie E. Fisher

Shane P. Fitzgerald

Eleanor Graham

Grant Tyler Gregus

Tyndale D. Hannan
Minor in German

Alexandra G. Hanselman
Minor in Astronomy

Elizabeth M. Harkavy
Also with a Major in Course VI-3

Jesus Herrera
Also with a Major in Course XVIII

Clyde E. Huibregtse
Also with a Major in Course XVIII-C

Hector L. Iglesias
Minor in Literature

Hikari Iwasaki
Also with a Major in Course XVIII
Minor in Chemistry
Minor in Computer Science

Matthew L. Johnston
Minor in Computer Science

Malvika R. Joshi
Also with a Major in Course VI-3
Minor in Mathematics

Sloan W. Kanaski
Also with a Major in Course XVIII

Robert Q. Kao

Ji Seok Kim
Minor in Music
Minor in Computer Science

John P. Kinney IV
Minor in Linguistics

Talya Klinger
Minor in Mathematics

Daniel A. Korsun
Minor in Nuclear Science and Engineering

Megan C. Kralj

Jay Laone

Kathryn Anna Lawrence

Ivy Li
Also with a Major in Course XXI-L

Kevin Limanta

Ting-Chun Lin
Also with a Major in Course XVIII
(February, 2020)

Vincent Liu

Federico Llarena III
Also with a Major in Course XIV-2
Minor in Mathematics

Adrian Leonardo Meza
Also with a Major in Course VI-2

Brian A. Mills
Minor in Japanese

Jason T. Necaise
Also with a Major in Course XVIII

Eber Nolasco-Martinez

Nolan Peard
Also with a Major in Course XXI-M

Isabelle Yan Phinney

Ryan C. Przybocki

Jane C. Reed
Also with a Major in Course XXII

William W. Roberts
Also with a Major in Course XVIII

Eduardo E. Sanchez, Jr.
(February, 2020)

Elina Maria Sendonaris

Adrian I. Silva

Cecilia Elena Siqueiros
Minor in Music

Benjamin A. Sockol
Also with a Major in Course XVIII

Kristen Marie Surrao
Minor in Mathematics
Minor in Computer Science

Bahrudin Trbalić
Also with a Major in Course VI-1

Shiaoching Tse

Gustavo A. Velez
Also with a Major in Course XVI-ENG

Vanessa W. Wong
Also with a Major in Course XIV-1

Laurel M. Wright

Qingyue Wu
Also with a Major in Course XVIII-C

Michelle Deng Xu
Also with a Major in Course XVIII

Megan Adrienne Yamoah
Also with a Major in Course VI-1

Josephine J. Yu
Also with a Major in Course XVIII

Jovan Y. Zhang

Bachelor of Science in Brain and Cognitive Sciences

Course IX

Department of Brain and Cognitive Sciences

Skylar J. Brooks

Merryn C. Daniel
Minor in Biology

Gretchen M. Eggers
Also with a Major in Course VI-3

Jingxuan Fan

Andrea Patricia Garcia

Tarun Vinod Kamath
Minor in Biomedical Engineering
(See also M.Eng., Course XX-P)

Ohyoon Kwon
Also with a Major in Course XXIV-1

G. R. Marvez

Maedeh Marzoughi
(February, 2020)

Briana Rose McRae
Minor in Computer Science

Habiba Noamany

Mercedes Melissa Clarke Riley
Also with a Major in Course XXIV-1
Minor in Business Analytics

Ashti M. Shah

Sara Muluneh Sime
Minor in Anthropology

Cailey Alexandra Irion Talbot
Minor in Anthropology

Aiyedun J. Uzamere

Eke M. Wokocha, Jr.

Chun-Chen Yao
Minor in Biomedical Engineering

Vivian Zhou
Minor in Biology
Minor in Women's and Gender Studies

Lena Li Zhu
Also with a Major in null
Minor in Biomedical Engineering

Bachelor of Science in Earth, Atmospheric, and Planetary Sciences

Course XII

Department of Earth, Atmospheric, and Planetary Sciences

Andrew T. Cummings
Also with a Major in Course VIII

Andrew J. Iversen
Minor in Physics

Charlotte L. Minsky
Also with a Major in Course XXI-E

Matthew R. Rushlow

Janice Shiu
Minor in Statistics and Data Science

Bachelor of Science in Mathematics

Course XVIII

Department of Mathematics

Al Baraa Abd Aldaim
Also with a Major in Course XXIV-1

Simon C. Alford
Also with a Major in Course VI-3

Fadi Atieh
Also with a Major in Course VI-3

Kevin William Beuchot Castellanos

Henrik J. Boecken

Emily S. Cheng
Also with a Major in Course VI-3

Anlong Chua

Sanath K. Devalapurkar
Minor in Physics

Matthew V. Ellison

Alonso Espinosa Domínguez

Maxwell K. Fishelson

Marisa R. Gaetz
Minor in Philosophy

Luis E. Garcia

Meghal Gupta

Kit Ives Peter Haines

Elizabeth J. Han

Bernardo A. Hernández Adame

Calvin Hsu
Also with a Major in Course VI-3
Minor in Economics

Kathryn Anna Jiang
Also with a Major in Course XXI-L

Menachem Mendel Keller
Also with a Major in Course XXIV-1
(February, 2020)

Ashley Hyowon Kim
Also with a Major in Course VI-2

Aleksa Konstantinov

Ama A. Koranteng
(February, 2020)

Olivia Graylen Koslow
Minor in Computer Science

Michael Kural

Timothy K. Leplae-Arthur

Justin K. Lim
Also with a Major in Course VI-3

Allen X. Liu
(February, 2020)

Eric M. Lu
Also with a Major in Course VI-3

Marta Manzin
Minor in Literature
Minor in Computer Science
(February, 2020)

Olga Medrano Martín del Campo
Minor in Computer Science

Lingjie Mei
Also with a Major in Course VI-3

Peter H. Mizes
Minor in Computer Science

Jonathan Erik Monahemi
Also with a Major in Course XV-2
Minor in Economics

Hamed Mounla
Also with a Major in Course XIV-1

Eshaan Nichani
Also with a Major in Course VI-3

Jack D. Novak
Also with a Major in Course XV-2

Zachary A. Obsniuk
Also with a Major in Course XXI-M

Yixuan Pei
Also with a Major in Course VI-3

Enrique Javier Pérez Serra
Also with a Major in Course XIV-1
Minor in Statistics and Data Science

Alok R. Puranik
Also with a Major in Course VI-3

Lara I. Rakocevic
Also with a Major in Course VI-3
(February, 2020)

Raimundo Xavier Rodriguez
Also with a Major in Course IX

Diego Alonso Roque Montoya

Ahaan S. Rungta
(February, 2020)

Ashwin Sah
(February, 2020)

Maya R. Sankar
Also with a Major in Course VI-3
Minor in Music

Mehtaab Sawhney
Minor in Computer Science
(February, 2020)

Abraham Shalom Mezrahi
Also with a Major in Course VI-14
Minor in Business Analytics

Hunter A. Smutney
Minor in Physics

Douglas John Stryker

Claire S. Tang
Also with a Major in Course VI-3

Jessica Sarah Titensky
Minor in Physics
Minor in Computer Science
(February, 2020)

Jared Anthony Tramontano

Margaret Katherine Trautner
Minor in Mechanical Engineering
Minor in Computer Science

Robert C. Upton IV
Also with a Major in Course XIV-1

Chase P. Vogeli
Minor in German

Tony Tong Wang
Also with a Major in Course VI-3

Matthew Barnert Weiss
Also with a Major in Course VI-14

Richard Yi
Also with a Major in Course VIII

Kate E. Yuan
Minor in Computer Science
(February, 2020)

Chaim Avram Bettigole Zeff

Julie Zhang
Minor in Economics
(February, 2020)

Ziqi Zhou
Minor in Biomedical Engineering

Taras Zhylenko
Also with a Major in Course VI-3
Minor in Statistics and Data Science

Bachelor of Science in Mathematics with Computer Science

Course XVIII-C
Department of Mathematics

Hannah S. Chen
Minor in Brain and Cognitive Sciences

John David DiCarlo

Matthew Farejowicz

Juan D. Gil Sanhueza

Yaakov A. Helman
Minor in Economics

Alexander Thomson Leighton

Ian James McNally

Manuel A. Montesino

Talia E. Pelts

Georgia U. Phillips
Minor in Economics

Aleksejs Popovs
Also with a Major in Course XXIV-1

Chad H. Qian
Also with a Major in Course XIV-1
Minor in Political Science

Deon Jordan Richmond
Minor in Japanese

Sarah G. Von Ahn
Minor in Statistics and Data Science

Amanda Fei Wang
Also with a Major in Course XV-2
(February, 2020)

Sarah Anqing Wu
Also with a Major in Course IX

Stephanie Louie Yuen
Minor in Finance

Lillian Zhang

Robert Jeffery Zollinger
Minor in Music

Jennifer Zou
Also with a Major in Course XIV-1
(February, 2020)

SCHOOL OF ARCHITECTURE AND PLANNING

Master of Architecture
Course IV
Department of Architecture

Alexandre Beaudouin-Mackay
(February, 2020)
A New Way of Play: The Forms and Functions of Participatory Design and Critical Pedagogies

Gustavo Carlos Casalduc Rivera
(February, 2020)
Terminal: A Public Archive for Habana

Stratton Coffman
(February, 2020)
Bagging

Boliang Du
(February, 2020)
Sichuan Fog -- Architecture and Moisture

Jaya Alba Eyzaguirre
(February, 2020)
Objects of Home

Marlena B. Fauer
(February, 2020)
Under Observation: A Site of Totality in Uncertain Futures

Dalma Földesi
(February, 2020)
More or Less Exact

Shepard Anton Halsey
(See also S.M., Real Estate Development)
Cyclic Matter(s) in Architecture

Gabrielle Joyce Heffernan
(February, 2020)
Responses to the Everyday: Reliefs from the Private

Trevor Nathaniel Herman Hilker
(February, 2020)
Other Stories

Stephan Michael Hernandez
(February, 2020)
Making Kin: Landscape, Material, and Senses

Angeline Claire Jacques
(February, 2020)
Mission 2066: A National Park for the Anthropocene

Dennis Steven Kosovac
Untitled, Ambiguity, and Architecture

Thuy Thanh Le
(February, 2020)
Falsework: Staging Construction

Hyerin Lee
Weathering the Storms: New Suburban Typology for Coastal Cities Through a Case Study on Winthrop, MA

Catherine Anabella Lie
Sourdough Architecture

Kevin Allen Marblestone
(February, 2020)
Pedagogy of the Fourth Wall: Toward a Time-Based Architecture

Aaron Powers
(February, 2020)
Stimulation, Speculation, Simulation: The Architecture of the Captured City That the Corporation Gave Us

Valeria Rivera Deneke
(February, 2020)
One Degree Removed: The Last Carnival of Venice

Jung In Seo
(February, 2020)
More or Less Exact

Taeseop Shin
(February, 2020)
Making Kin: Landscape, Material, and Senses

Cristina Solis
(February, 2020)
Tremulous Lines, the Alternative History of a Site Exception

Cheyenne Jacqueline Louis Vandevoorde
(February, 2020)
Into The Abstract

Sarah Elizabeth Wagner
(February, 2020)
A New Way of Play: The Forms and Functions of Participatory Design and Critical Pedagogies

Patrick Alexander Weber
Don't Be A Tourist! - Imagining a Post-Touristification Berlin

Emily Mary Whitbeck
(February, 2020)
Pedagogy of the Fourth Wall: Toward a Time-Based Architecture

Chaoyun Wu
(February, 2020)
Machine Learning in Housing Design: Exploration of Generative Adversarial Network in Site Plan/Floorplan Generation

Fei Xu
(See also S.M., Real Estate Development)
From Seed to Sale

Shane Xue Ying Zhang
(February, 2020)
(See also S.M., Real Estate Development)
Value in Design? Features, Pricing, and Design Strategies

Zhujing Zhang
(February, 2020)
Komorebi 木漏れ日Embedding Dappled Sunlight in the Built Environment

Master of Science in Architecture Studies
Course IV
Department of Architecture

Nawaf Bin Abdulaziz Bin Ayyaf Al-Mogren
Diriyah Narrated by its Built Environment: The Urban Development of the First Saudi Capital (1744-1818)

Nathaniel Joseph Elberfeld
Computing Embodied Effort in the Constructible Design Space of Bobbin Lace

Joud Enaam Mounir El-Mabsout
Contested Valleys, Reclaiming the Common Landscape in Bisri, Lebanon

Rodrigo Escandón Cesarman
How to Read the Self-building Manual: Houses, Self-builders, and Experts in Mexico

María Esteban Casañas
Artificial Perceptions: Biases, Fictionalities, and Signifiers.

Melissa Gutiérrez Soto
Manual for Hospitable Cities: Learning from Migration

Rachel Pei Hirsch
Building Mughal Burhanpur

Yichen Jia
(See also S.M., Course VI)
Constructing Virtual Reality Exhibitions with Multimodal Interactions

Sea Hoon Kim
(See also S.M., Real Estate Development)
Technology-Enabled Infrastructure Analysis of its Economics, Public Benefits and Urban Experience

Meng-Fu Kuo
Urbanism Across: New Urban Ground in Taipei's Old City Core

Lukas Lesina Debiasi
(See also S.M., Course VI)
Illuminating Preference: Rethinkng Colored Lighting in Workplace Environments

Qianhui Liang
(February, 2020)
(See also S.M., Course VI)
Machine Mediated Human Perception

Yuxuan Liu
Measuring the Immeasurable: An Experiment for a Machine to Map Low-Level Features to High-Level Semantic Representation of Architectural Space Using a Single View Photo

Semine Long-Callesen
The Raffles Museum in the Shift from Nature to Culture

Daniella Samira Maamari
(February, 2020)
Reviving Cosmopolitan Beirut: A Case Study of Three Modernist Art Spaces

Molly Mason
Crafting Decisions: Integrating Design, Fabrication, and Assembly for Six-Axis Robotic Arms

Andrew Robert Moorman
(February, 2020)
(See also S.M., Course VI)
Machine Learning Inspired Synthetic Biology: Neuromorphic Computing in Mammalian Cells

Nof Nathansohn
Digital Nomads: Space+Narrative Computing for the Village of Al Araqib

James Patrick Peraino
(See also S.M., Course VI)
Architectural Epidemiology: A Computational Framework

Charu Sharma
Building an All-Electric Volpe: A Perspective on Economic Considerations and Carbon Emissions.

Michael Todd Stradley
Colorzoom

Tuo Sun
(February, 2020)
(See also S.M., Course VI)
Synthesizing 3D Morphology from a Collection of Urban Design Concepts

Shaoying Tan
(See also S.M., Course VI)
Space is the Interface: Evaluating Spatial Knowledge Acquisition in Virtual Reality from the Perspective of Locomotion

Yair Yakov Titelboim
(February, 2020)
(See also M.C.P., Course XI)
Granular Urbanism: Adaptive Strategies for Obsolete Downtown Neighborhoods

Anna Vasileiou
Thinking Manual: A Digital Framework for Designing and Making

Piyush Verma
Rainwater Harvesting in Western Ghats of Maharashtra. The Case of Velhe Block, Pune A comprehensive multi-scalar approach.

Haoyu Wang
Digital Nomadism - The Shaping of a Future Place for Placeless People

Master of Science in Building Technology
Course IV
Department of Architecture

Demi Lin Fang
Timber Joinery in Modern Construction: Mechanical Behavior of Wood-Wood Connections

Master in City Planning
Course XI
Department of Urban Studies and Planning

Zachary Wayne Avre
"The Backbone of Chicago's Economy": the Chicago Microlending Institute and the Road to Financial Inclusion for Entrepreneurs of Color

Neha Bazaj
Daylighting Pathways to Good Jobs in California's Solar Industry

Abigail Bliss
Fault Lines: The Legacy of Urban Renewal in Hudson, NY

Braxton Corbin Bridgers
The Climate Code: A Framework to Enhance Emergency Response Through Civic Digital Participation

Tessa Mae Buono
(September, 2019)
Equitable Visitation of National Parks: Shedding Light on Community Partner Perspectives to Improve Park Planning for All

Anne Kiyono Calef
Provisioning Public Education: Infrastructural Violence, School Districting, and Spatialized Inequity in the San Francisco Bay Area

Diego Hernán Castillo Peredo
Development inequity: Advancing distributive justice by localizing SDG indicators for municipalities in Chile

Agustín Corwin Cepeda
The Punto Urban Art Museum in Salem, MA: A Case Study for Shared Authority

Jenny Wenjie Chen
Integrating Neighborhoods, Segregating Power

Julia Curbera
The Punto Urban Art Museum in Salem, MA: A Case For Shared Authority

Peter Leopold Damrosch
(February, 2020)
Mobility as a Public Service: Integrating Civil Rights Laws in Partnerships Between Transit Agencies and Ride-Hailing Companies

Sarah H. Edgar
Does the Siting of Neighborhood Incarceral Facilities Influence Local Police Behavior?

Stephen Migliore Erdman
Resilience Special Assessments for Housing Security: A Model for Mitigating Climate and Environmental Gentrification in New York City

Yichun Fan
Air pollution, Avoidance Behaviors, and Neglected Social Costs: Evidence from Outdoor Leisure and Commuting Behaviors

Zhuangyuan Fan
Connecting the Last Mile: Understanding Internet Service Providers Typologies to Connect Underserved America

Julia Marie Field
Urban Tree Canopy Governance and Redlined Neighborhoods: An Analysis of Five Cities

Mario Jezierski Goetz
Marginal Mobility: Public Transit Infrastructure for Precarious Settlements in Metropolitan Buenos Aires

Dylan Christopher Halpern
Community Remedies for Civic Disorientation, De-mobilization, and Malinformation

Carl Gunnar Hedman, Jr.
New Prescriptions? Nonprofit Hospital and Health System Charitable Spending on Housing as a Social Determinant of Health

Anne Woodbridge Hudson
(See also S.M., Transportation)
Whereto Next? Analyzing Livability and Accessibility in the Later Stages of Life

Jeff Jamawat
(September, 2019)
(See also S.M., Real Estate Development)
Redesign, Redeploy, and Re-envision Urban Corporate Headquarters: Amazon's Seattle Campus Case Study

Shail Joshi
Managing the Water Crisis in Bundelkhand, India: A Governance Approach

Jonathan Hoagland Leape
(See also S.M., Transportation)
Winning the Housing Lottery in Rio de Janeiro: Curse or Cure?

Jintai Li
(September, 2019)
(See also S.M., Transportation)
Future Transit Service for a Broader User Base: Demand Analysis of Hypothetical Autonomous Vehicle Mobility Services Using a Stated Preference Approach

Kevin M. Li
(February, 2020)
An Analysis of Nonprofit Board Interlock Networks

Kendrick R. Manymules
Coal's Afterlives, Diné (Energy) Futures

Zoë Louise McAlear
Building Community Resilience to Climate Change with Facilitated, Collaborative Dialogue: Evaluating the VCAPS Process

Emmett Zane McKinney
Code Shift: Data, Governance, and Equity in Los Angeles's Shared Mobility Pilots

Kenyatta Theda McLean
Reclaiming Time and Space: Bringing Historical Preservation into the Future

Hannah Hunt Moeller
National Forests are (not) Parks: Managing Amenity Migration to America's National Forests

Ian Michael Ollis
Alleviating Carmageddon with a Research-Driven Rapid Transit Approach

Stephanie Elaine Peña
(Re)Centering Place within Detroit's Black Gentrification

Daniel Larkin Powers
Can State and Local Basic Income Policies Support Planning for Equity?

Marisa Rene Prasse
On Shaky Ground: How Environmental Hazards Impact Affordable Housing Development in San Francisco

David Bloom Robinson
The Stability Gap: Evictions and the Legacy of Housing Segregation in Boston's Communities of Color

Sean Patrick Robinson
(September, 2019)
(See also S.M., Real Estate Development)
A Regional Assessment of Transit-Oriented Office Development Opportunities in Boston's Suburbs

Radhika Singh
Managing the Water Crisis in Bundelkhand, India: A Governance Approach

Mary Hannah Smith
Creating a Market for Retreat: Transfer of Development Rights as a Climate Adaptation Tool in Coastal Massachusetts

Wonyoung So
Wesurvived.nyc: Participatory Mapping as a Political Act

Tanaya Srinivasakrishnan
Calculating Governance: City Benchmarking & Its Discontents

Tianyu Su
Identifying Commuting Behavior Segments for TDM Program Design: University Case Study

Jialu Tan
(See also S.M., Course VI)
Using Machine Learning to Identify Populations at High Risk for Eviction as an Indicator of Homelessness

Fiona Tanuwidjaja
A Guide to Palm Oil in Indonesia: Institutions and Their Effects on Independent Smallholder Farmers

Yair Yakov Titelboim
(February, 2020)
(See also S.M.Arch.S., Course IV)
Granular Urbanism: Adaptive Strategies for Obsolete Downtown Neighborhoods

Vanessa Toro Barragán
"¡El Pueblo No Se Rinde, Carajo!" (The People Will Never Give Up, Dammit!): A Case Study of the Buenaventura Civic Movement's Contributions to Insurgent Planning

Natalia Isabelle Vidigal Coachman
Planning Child-Friendly, Educating, and Learning Cities: An Urban Framework for Sao Paulo

Carolyn Weng Yang
Governing the Urban Innovation Economy: Trade-Offs Between Equity and Growth

Yao Zhao
(February, 2020)
(See also S.M., Course VI)
Deep Learning for Sentiment and Event-Driven REIT Price Dynamics

Master of Science in Urban Studies and Planning

Course XI

Department of Urban Studies and Planning

Suresh Subramanian
Does Living in a Slum Matter for HIV Medication Adherence? Examining Adolescent Behavior in Matero, Zambia

Master of Science in Media Arts and Sciences

Program in Media Arts and Sciences

May Alhazzani
(September, 2019)
Deep Embedding Approach to Classify Purpose of Trips between Cities from GPS Data

Safinah Arshad Ali
(September, 2019)
Designing Child Robot Interaction for Facilitating Creative Learning

David Wesley Anderton-Yang
(September, 2019)
Countering Source Bias in News

Lizbeth Barrios De La Torre
Exploratory Design Methods and Techniques in Support of Space Mission Concept Development

Marc Exposito Gomez
(September, 2019)
The LVN Mixtapes: Using Augmented Audiotapes for Story Sharing

Adam Jedidiah Haar Horowitz
(September, 2019)
Incubating Dreams Awakening Creativity

Tsung-Han Hsieh
(September, 2019)
Design and Control of a Two-degree-of-freedom Powered Ankle-Foot Prosthesis

Margaret Ann Hughes
Keeper: Online conversation support scaffolding modeled after ancient and modern social technologies

Britney Lorraine Johnson
(September, 2019)
Kicks x Cliques: Exploring the Intersection of Sneaker Culture and Mental Health in the Black Community

Noah Corinthian Jones
Prediction and Analysis of Degree of Suicidal Ideation in Online Content

Joseph Henry Kennedy, Jr.
Designing for Uncertainty: Material-Based Fabrication Processes for Indeterminate Outcomes

Felix Lorenz Kraemer
Live to Build, Build to Live: Organism-Machine Interfaces for Co-fabrication

Hane Lee
(September, 2019)
Freedom Simulator

Nicolas Alexander Lee
Designing for the Endless Ecosystem

Isabella Loaiza Saa
(September, 2019)
Cheap Signals and Costly Consequences

Tomohiro Maeda
Computational Imaging with Scattered Photons to See inside the Body

Bridgit Claire Mendler
OurStory: Dispute System Design Technology for Stakeholder Inclusion

Marian Mwikali Muthui
Jiradi: Reflective Documentation to Support Creative Learning and Skills Development

Ufuoma Ovienmhada
Earth Observation Technology Applied to Environmental Management: A Case Study in Benin

Vikraman Parthiban
(September, 2019)
LUI: A Scalable, Multimodal Gesture and Voice Interface for Large Displays

Blakeley Hoffman Payne
Can My Algorithm Be My Opinion?: An Ethics of Artificial Intelligence Curriculum for Middle School Students

Ri Ren
Comb the Honey: Bee Interface Design

Oscar Rosello Gil
(February, 2020)
HeartBit: Mindful Control of Heart Rate Using Haptic Biofeedback

Caroline Rozendo Xavier dos Santos
(September, 2019)
PerForm: Deformable Interface for Dynamic Representation of Sound Through Meaningful Shapes

Tony Shu
(September, 2019)
Coordination of Lower Limb Movement Utilizing the Agonist-Antagonist Myoneural Interface

Tomás Alfonso Vega Gálvez
(September, 2019)
μJawstures: Jaw-teeth Microgestures for Discreet Hands-and-Eyes Free Mobile Device Interaction

Zeguan Wang
Whole-Brain Voltage Imaging of Larval Zebrafish Using Light-field Microscopy

Ramon Elias Weber
Geometries of Light

Jerry Wei-Hua Yao
(September, 2019)
IDK: An Interaction Development Kit to Design Interactions for Lightweight Autonomous Vehicles

Seong Ho Yeon
(September, 2019)
Design of an Advanced sEMG Processor for Wearable Robotics Applications

Takatoshi Yoshida
(September, 2019)
SCALE: Exploring Human-Object Interaction Through Force Vector Measurement

Master of Science in Media Technology

Program in Media Arts and Sciences

Carlos Núñez López
(September, 2019)
A Modular and Stretchable Electronic System for On-body Health Monitoring Applications

Master of Science in Real Estate Development

Center for Real Estate Development

Salma Samir Abdelgawad
Cross-Subsidy Models for Urban Manufacturing

Arash Arbabi
(February, 2020)
Capturing the Sun: How to Monetize Solar Energy in Multi-family Developments

Stefan James Bird
(February, 2020)
Cash Flowing Solar Developments for Long-Term Real Estate Redevelopment Opportunities

Philip Caporaso
(September, 2019)
Taxi Activity as a Predictor of Residential Rent in New York City

Jeffrey Thomas Dougherty
(September, 2019)
From Clicks to Bricks: The Impact of Digital-native Consumer Brands on Retail Real Estate

Tianyi Fan
(February, 2020)
An International Comparison on Coworking Companies Using Case Study Approach

Bretton Cody Finley
(September, 2019)
The Viability of the "Build-to-Rent" Single-Family Model in Tertiary Markets

Shepard Anton Halsey
(See also M. Arch., Course IV)
Cyclic Matter(s) in Architecture

Abdulrahman Hadi Hammoud
(February, 2020)
A Review of the Housing Market in Beirut between 2005 and 2019

Charles Thomas Hope
(September, 2019)
The Maturation and Resiliency of the Self-Storage Asset Class

Jeff Jamawat
(September, 2019)
(See also M.C.P., Course XI)
Redesign, Redeploy, and Re-envision Urban Corporate Headquarters: Amazon's Seattle Campus Case Study

Sea Hoon Kim
(See also S.M.Arch.S., Course IV)
Technology-Enabled Infrastructure Analysis of its Economics, Public Benefits and Urban Experience

Justin Christopher Lai
(September, 2019)
The Leasehold as an Alternative Ownership Structure

Valeri Patricia Limansubroto
(February, 2020)
Challenging the Generic: From Space to Place in Urban Development

Aaron Adam Manji
(September, 2019)
Co-Living as an Emerging Market: An Assessment of Co-living's Long-Term Resiliency (with S.H. Pepper)

Kenneth Paul Nolan
(February, 2020)
Transit Oriented Development: Best Practices and Stakeholder Perspectives

Wee Kian Alvin Ong
(September, 2019)
Quantifying Partnership Terms in Real Estate Joint Ventures

Sam Howard Pepper
(September, 2019)
Co-Living as an Emerging Market: An Assessment of Co-Living's Long-Term Resiliency (with A.A. Manji)

Gina Marie Pfingston
(September, 2019)
Risk Perception of Unentitled Land

Sean Patrick Robinson
(September, 2019)
(See also M.C.P., Course XI)
A Regional Assessment of Transit-Oriented Office Development Opportunities in Boston's Suburbs

Eric Charles Rosenthal
(September, 2019)
A Development Perspective on Creating Workforce Rental Housing Proximal to Major Employment Centers

Yuling She
Redevelopment Option Value for Industrial Property

Jiri Sykora
(September, 2019)
Vacancy Durations in the Office Market

Renjie Tang
(September, 2019)
Real Estate Crowdfunding in China

Wade Morrow Vaughn
(September, 2019)
Overlooked Opportunities: Small Class B Multifamily in Secondary Sun Belt Markets

John Royall Warman
(February, 2020)
Incentivizing Historic Rehabilitation and Adaptive Reuse in the United States and United Kingdom

Christopher Joseph Whittier
(September, 2019)
Commercial Real Estate Volatility: A Decomposition of Historical Market Values

Thomas Forbes Worth II
(September, 2019)
Housing Assistance and the Creation of Household Wealth

Fei Xu
(See also M. Arch., Course IV)
From Seed to Sale

Qianwen Yin
(September, 2019)
Exploring REITs for Community-Based Retail Development in China: A New Strategy to Create Better Places to Live

Nicole Remi Zaccack
(February, 2020)
How Real Estate Developers Define and Implement Their Social Impact Goals through the Real Estate Development Process

Shane Xue Ying Zhang
(February, 2020)
(See also M. Arch., Course IV)
Value in Design? Features, Pricing, and Design Strategies

Master of Science (without specification of field)

Salah Assana
Med. Arts & Sciences
Cardiovascular Activity Monitoring Using mmWaves

Sara E. Falcone
Med. Arts & Sciences
(February, 2020)
Zipped Assembly

Jake Robert Read
Med. Arts & Sciences
(February, 2020)
Distributed Dataflow Machine Controllers

Han Wen Shen
Med. Arts & Sciences
(September, 2019)
Affective Computing and
Crowdsourcing: Subjective Labels and
Sequential Effects

Elizabeth Ashton Strait
Med. Arts & Sciences
(September, 2019)
Genetic Circuits for Functional Screens
of Cas12a Guide RNA Libraries

Jaleesa Trapp
Med. Arts & Sciences
(September, 2019)
Uncovering Hidden Pathways

Ezinne Egondu Uzo-Okoro
Med. Arts & Sciences
Characterization of On-Orbit Robotic
Assembly of Small Satellites

SCHOOL OF HUMANITIES, ARTS, AND SOCIAL SCIENCES

Master of Science in Economics

Course XIV

Department of Economics

Iason Nikolaos Zaverdinos
Behavioral Responses to Public Pension Cuts: Evidence from the Greek Financial Crisis

Master of Science in Political Science

Course XVII

Department of Political Science

Samuel Rockwood Hoar
(September, 2019)
Presidential Power and Partisan Polarization

Len Chow Koh
(September, 2019)
China's Preference for the Regional Order in East Asia

Cheng Yi Lewis Won
(September, 2019)
Political Cleavages and the Global Privacy Regime

Master of Science in Science Writing

Course XXIW

Program in Writing and Humanistic Studies

Diego Arenas
(September, 2019)
Minding the Empathy Gap: How Insights into Brains and Behaviors are Placating Polarization

Brittany Jean Flaherty
(September, 2019)
The Conservation Sacrifice: How Far New Zealand Will Go to Save Its Birds

Eva Charles Anna Frederick
(September, 2019)
Plague of Absence: Insect Declines and the Fate of Ecosystems

Devi Kailasa Lockwood
(September, 2019)
The Living Library

Emily R. Makowski
(September, 2019)
Mass Appeal: Saving the World's Bananas from a Devastating Fungus

Emily Pontecorvo
(September, 2019)
Navigating the 21st Century Without Vision

Madeleine Renee Turner
(September, 2019)
Future Talk: The Race to Build a Bot that Gabs like a Human

Gina Carmela Vitale
(September, 2019)
Asbestos, USA: Ambler, Pennsylvania Once Thrived as the Asbestos Capital of the World - Now it Grapples with the Waste That Was Left Behind

Master of Science in Linguistics

Course XXIV

Department of Linguistics and Philosophy

Verena Hehl
(September, 2019)
Intervention Effects in German: A Contiguity Approach

Daniel Margulis
(September, 2019)
Expletive Negation and the Decomposition of *Only*

Master of Science in Comparative Media Studies

Program in Comparative Media Studies

Elizabeth Denise Borneman
Data Visualizations for Perspective Shifts and Community Cohesion

Iago Bueno Bojczuk Camargo
Media Cartographies of Broadband Access in Brazil: The Case of the Geostationary Defense and Strategic Communications Satellite (SGDC-1) and Rural Schools

Woorim Chung
Subverting "The Algorithm": Examining Anti-Algorithmic Practices on Social Media

Judy Ann Heflin
AI-Generated Literature and the Vectorized Word

Samuel Romero Mendez
Health Equity Rituals: A Case for the Ritual View of Communication in an Era of Precision Medicine

Sultan Iman Sharrief
(September, 2019)
Wrestling With Systemic Edges; Designing for Long Term Social Change

Benjamin Luke Malanos Silverman
Fursonas: Furries, Community, and Identity Online

Han Su
Theory And Practice Towards A Decentralized Internet

Annie Wang
Creators, Classrooms, and Cells: Designing for the Benefits and Limitations of Learning In Immersive Virtual Reality

SCHOOL OF SCIENCE

Master of Science in Chemistry
Course V
Department of Chemistry

Nadide Hazal Avcı
(February, 2020)
Synthesis and Optimization of Synthetic Intermediates to Access C21-Oxygenated Aspidosperma Alkaloids

Hyehwang Kim
Utilization of Tetrametaphosphate Anhydride for the Synthesis of Disubstituted Tetraphosphates, Terminally Modified Nucleoside 5'-Pentaphosphates, and Beyond

Chloe Anne Morgan
(September, 2019)
Solid-State NMR Investigation of Viral Fusion Glycoprotein 41 (gp41)

Merjema Purak
Synthesis and Applications of Functionalized Iptycenes

Jeffrey Neal Rosenberg
(February, 2020)
Spectroscopic and Reactivity Studies on Graphite-Conjugated Salen Complexes

Master of Science in Biology
Course VII
Department of Biology

Daniel Fernando Ramirez Montero
(September, 2019)
An Assembly Model for the Autophagy Initiation Complex

Master of Science in Physics
Course VIII
Department of Physics

Min Gu Kang
(February, 2020)
Resonant Elastic and Inelastic X-ray Scattering Studies on Electronic Orders and Excitations in High-Temperature Superconducting Cuprates

Jianshu Li
(February, 2020)
Preliminary Work for Three-Dimensional Imaging of the Epoch of Reionization with Interferometers

Zeyang Li
(September, 2019)
Unified Treatment of Light-Induced Effects for Atomic Ensemble in Optical Cavities

Garrett Kenji Simon
Measuring Trapped-Ion Motional Decoherence through Direct Manipulation of Motional Coherent States

Master of Science in Brain and Cognitive Sciences
Course IX
Department of Brain and Cognitive Sciences

Mackenzie C. Lee
A General Method for Three Color STED Microscopy with One Depletion Laser: Application to Primary Neuronal Cultures

Sebastian Boyd Templet
(February, 2020)
The Role of Neurogranin in Modulating Contextual Memory and Plasticity: FMRP Involvement and Adrenergic-Dependent Facilitation

Master of Science in Earth and Planetary Sciences
Course XII
Department of Earth, Atmospheric, and Planetary Sciences

Jorsua Herrera Bethencourt
(September, 2019)
Molecular Characterization and Effect of Diagenesis and Maturation of Melanin in the Fossil Record

Taylor K. Safrit
Centaur Shapes and the Origin of Bilobate Jupiter-Family Comets

Anuar Togaibekov
Monitoring of Oil-Production-Induced Subsidence and Uplift

Master of Science in Mathematics
Course XVIII
Department of Mathematics

Mason Thomas Biamonte
(February, 2020)
Quantum Phase Estimation without the Quantum Fourier Transform

AWARDED JOINTLY WITH THE WOODS HOLE OCEANOGRAPHIC INSTITUTION

Master of Science in Mechanical Engineering

Ryan Lee Conway
Course II
(September, 2019)
Coordinated Tracking and Interception of an Acoustic Target Using Autonomous Surface Vehicles

Michael Jesus Humara
Course II
Stochastic Acoustic Ray Tracing with Dynamically Orthogonal Equations

Andrew Stafford Johnson
Course II
(September, 2019)
Development and Deployment of a Novel Deep-sea *in situ* Bubble Sampling Instrument for Understanding the Fate of Methane in the Water Column

Master of Science in Aeronautics and Astronautics

Kevin Joseph Doherty
Course XVI
(September, 2019)
Robust Non-Gaussian Semantic Simultaneous Localization and Mapping

Stewart C. Jamieson
Course XVI
Enabling Human-Robot Cooperation in Scientific Exploration of Bandwidth-Limited Environments

Victoria Lynn Preston
Course XVI
(September, 2019)
Adaptive Sampling of Transient Environmental Phenomena with Autonomous Mobile Platforms

Master of Science in Chemical Oceanography

Tyler James Tamasi
Course XII
(September, 2019)
Nitrogen Cycling in Tropical Reef-Building Corals: A Case Study From the Gardens of the Queen, Cuba

Master of Science in Physical Oceanography

Stephan Dominic Gallagher
Course XII
(September, 2019)
Oceanic Response Observations due to Passing Tropical Cyclones: An Assessment of Drag and Sea Spray Parameterizations

SCHOOL OF ENGINEERING

Master of Engineering in Civil and Environmental Engineering

Course I-P

Department of Civil and Environmental Engineering

Ho Yin Ernest Ching
Truss Topology Optimization of Steel-Timber Structures for Embodied Carbon Objectives

Judyta Maria Cichocka
(February, 2020)
INFRAME - Design and Construction of a Sequentially Erected Elastic Timber Gridshell

Ishani Desai
Designing Structures with Tree Forks: Mechanical Characterization and Generalized Computational Design Approach

Ayse Y. Heckel
Spider Web Geometry Inspires Long Span Roof Trusses

Alexandra Abla Kawar
Comparative Study of Bracing Patterns and Materials for Tall Timber Buildings

Xin Y. Lo
Analysis and Reproduction of Geopolymer Concrete

Brian Todd Luster
Evaluation of the Design Space for Reinforced Concrete Building Components Subject to Blast Loading

Grace E. Melcher
Topology Optimized Hemispherical Shell Under Asymmetric Loads

Anna Sofia Montoya-Olsson
Parametric Modeling and Optimization of External Braced Frames for Embodied Energy and Daylight Availability

Herbert Mwesigye Nuwagaba
Opportunities for Affordable Construction in Uganda Using Locally Available Materials

Michael Roland Ramirez
Optimization and Analysis of Doubly-Curved Kirigami Space Frames

Diego Alfonso Rivera
Optimization of Patterned Surface Structures

Daniel Campbell Seats
Form Finding of Structural Reused Material Trusses with Graphic Statics

Amber R. VanHemel
(February, 2020)
Spatial Variance of Peat Subsidence in Southeast Asia by Land Use

Enrique Velez Lopez
(February, 2020)
(See also S.M., Course XXII)
Is Embedding the Reactor Building Below Grade a Cost-Effective Proposition?

Eric Wong
Multi-Objective Exploration of Photovoltaic Green Roof Design

Edmundo Rodolfo Zambrano
Proposed North-South Rail Link Tunnel in Boston and its Structural Effect on an Existing Highway Bridge

Master of Science in Civil and Environmental Engineering

Course I

Department of Civil and Environmental Engineering

Audrey Bazerghi
(See also M.B.A., Course XV)
Inventory Modeling for Active Pharmaceutical Ingredient Supply Chains

Katerina Boukin
Improving the South Boston Rail Corridor

Angela Marie Cacciola
(September, 2019)
Are PCBs in Phytoplankton and Zooplankton at Equilibrium with the Water in Which They Live?

Shouvik Das
(See also M.B.A., Course XV)
Multi-Echelon Supply Chain Design for Amazon Private Brands

Monica Francesca Harnoto
(See also M.B.A., Course XV)
Value of Distribution-Level Reactive Power for Combined Heat and Power Systems

Nalaka Kanishka Bandara Kahawatte
(See also M.B.A., Course XV)
Digital Business Model Development and Validation for Real-Time Monitoring Solution for Electrical Power Transformers

Zihuai Liu
(See also M.B.A., Course XV)
Artificial Intelligence Infrastructure into Material Attributes Insights

Randall Chase Markham
(See also M.B.A., Course XV)
Reducing Inventory through Supply Chain Coordination in an Industrial Supply Chain

Michael Vincent Martello
Resilience of Rapid Transit Networks in the Context of Climate Change

Lorcan A. Murphy
(See also M.B.A., Course XV)
Increasing E-commerce Distribution Center Capacity Through Slotting Strategy

Margaret Ellen Neff
(See also M.B.A., Course XV)
Evaluating Modeling Techniques for Quantifying Production Risk in Contact Lens Manufacturing

Aramael Andres Peña-Alcántara
Tracking Engagement: A Machine Learning Framework for Estimating Affective Engagement

Hannah Michelle Phillips
(See also M.B.A., Course XV)
A Data-Driven Approach to Continuous Improvement in Reverse Logistics

Stephane Poulain
(September, 2019)
Bursting Bubbles and Water-to-air-transfer: Interplay between Underlying Physics and Microbial Contamination

James Clifford Rowe
(September, 2019)
Heterogeneous Reaction of Benzo[a]pyrene with Hydroxyl Radical and Ozone Under Atmospherically Relevant Conditions: Kinetics and Product Analysis

Sama Taha
Effect of Nano Cellulose and Nano Carbon Black on Cement Paste Microstructure

William Geoffrey Winegar
(See also M.B.A., Course XV)
Standardization of New Product Introductions to Achieve Zero Defect Lines

Master of Engineering in Advanced Manufacturing and Design

Course II-P
Department of Mechanical Engineering

Diarny Oliveira Fernandes
(September, 2019)
Design and Development of a Precision Packaging Stage and Master Control System for an Automated Vial Packaging Machine

Jessica Elizabeth Harsono
(September, 2019)
Optimizing Distribution Center Packing Operations to Reduce Volumetric Shipping Costs

Siyang Liu
(September, 2019)
Design and Development of an Automated Inspection System for Vials

Efstratios Moskofidis
(September, 2019)
Design and Development of a Transfer System for an Automated Packaging Machine

Steven Adam Ratner
(September, 2019)
Design and Development of a Placement Mechanism for an Automated Packaging Machine

Dehui Yu
(September, 2019)
Evaluation of Outbound Operations Improvement Projects for Distribution Centers

Bowen Zeng
(September, 2019)
Improved Packing Strategy for Distribution Centers to Reduce Freight Cost

Zhengyang Zhang
(September, 2019)
Design and Development of an Automated Sorting and Orienting Machine for Vials

Master of Science in Mechanical Engineering

Course II
Department of Mechanical Engineering

Robert James Addy
(See also M.B.A., Course XV)
Cost of Complexity: Mitigating Transition Complexity in Mixed-Model Assembly Lines

Abdulmohsen Sulaiman Alowayed
(September, 2019)
Design of a Small-Scale and Off-Grid Water Desalination System Using Solar Thermal Heating and Mechanical Vapor Compression

Ankur Mukesh Amlani
(See also M.B.A., Course XV)
Floor Entry Task Prioritization for Highly Automated Fulfillment Centers

Graham Philip Arrick
Delivery of Large-molecule Therapeutics via Jetting in the Gastrointestinal Tract

Kwabena K. Arthur
On the Use of Prior Knowledge in Deep Learning Algorithms

Andrew Ryan Bader
Biomaterials for Non-Viral Delivery of Nucleic Acid Drugs

Jason Barnell Barker
(See also Naval E., Course II)
Automated Decision Making for Operations within a Traffic Separation Scheme Using MOOS-IvP

David Paul Baxter
(See also Naval E., Course II)
Toward Robust Active Semantic SLAM via Max-Mixtures

John Harry Bell IV
A Two-Motor Actuator for Legged Robotics Applications

Dextina A. Booker
(See also S.M., Engineering and Management)
The Future of Fashion & Human Gesture Control: Exploration of a Wearable Communication Device for Sign Language Speakers

Audrey N. Bosquet
Body Scan Processing, Generative Design, and Multi-Objective Evaluation of Sports Bras: A New Design Strategy

Casey Alex Boyle
(See also M.B.A., Course XV)
Process Enablers for Successful Reverse Engineering inside Large Organizations

Austin R. Brown
Novel Magnet Structures for Mechanically Robust Linear Motors

Steven Burcat
(February, 2020)
Design and Evaluation of an Abrasive Saw Kickback Machine

Caitlin Mary Butala
(See also M.B.A., Course XV)
Connected Factory: Real Time Data Analysis for Manufacturing Efficiency

Daniel A. Carballo
(February, 2020)
Visual Navigation for Dynamic Quadruped Robots

Alexis-Tzianni Charalampopoulos
(September, 2019)
Machine Learning Non-local Closures for Turbulent Anisotropic Multiphase Flows

Yasmin Chavez
System Identification and Control of a Miniature External Mechanical Vibration Device towards Clinical Ultrasound Shear Wave Elastography

Hongling Chen
(See also S.M., Engineering and Management)
A Vascular Imaging System for Longitudinal Registration and Mapping of Superficial Vessels with Quantitative Analysis

Pin-Yi Chen
(See also S.M., Course VI)
Resource Competition in CRISPR-Mediated Gene Regulation

Yudong Chen
(September, 2019)
Water Splitting For Hydrogen and Syngas Production over a Novel Bi-layer Perovskite Membrane

Brendon W. Chiu
(See also M.B.A., Course XV)
Additive Manufacturing Applications and Implementation in Aerospace

Jeffrey Bowen Chu
(See also M.B.A., Course XV)
Investigating the Feasibility and Impact of Integrating Wire-Arc Additive Manufacturing in Aerospace Tooling Applications

Donald Mateo Coates
(See also M.B.A., Course XV)
Integrating Agile within Complex Hardware Development via Additive Manufacturing

Alban C. Cobi
A Suction-Based Reversible Attachment and Locomotion Mechanism for an Underway Vessel Hull Cleaning and Inspection Robot

Ellen Coleman
(See also M.B.A., Course XV)
Establishment of a Novel *Pichia Pastoris* Host Production Platform

Julia Elizabeth Cumming
(See also S.M.(N.A.M.E.), Course II)
The Practicality of Adaptable Geometry Centrifugal Pumps in U.S. Navy Systems

Lea A. Daigle
(See also M.B.A., Course XV)
Organizational Architecture Design and Assessment of Statistical Feasibility for FSDA Implementation in an Airplane Subassembly

Kyle Ricardo Danner
(See also M.B.A., Course XV)
Utilizing Automated Inspection to Identify Surface Quality Defects within the Automotive Body Assembly Process

Fatima Zahraye Diallo
(See also M.B.A., Course XV)
Using Discrete-Event Simulation to Increase System Capacity: A Case Study of an Assembly Plant

Gregory Dreifus
(February, 2020)
Analysis of Tool Path Optimization in Large Scale Additive Manufacturing

Huifeng Du
Finite Element Analysis of Adhesive Contact Interface in Continuous 3D Printing

Raz Elhassid
(February, 2020)
(See also S.M.(N.A.M.E.), Course II)
Experimental Verification of Biomimetically Designed Ventral Fins for AUVs

Lindsay M. Epstein
Bi-Modal Hemispherical Sensors for Three Axis Force and Contact Angle Measurement

James Gabbard
(February, 2020)
An Immersed Interface Method for Incompressible Flow with Moving Boundaries and High Order Explicit Time Integration

Brian Gabriel Gaudio
(See also M.B.A., Course XV)
Assessing the Impact of Historical Operational Data from Complex Assets on Predictive Maintenance Models

Kaitlyn Elizabeth Gee
Numerical Tools for Rate-Cost-Quality Analysis of Laser-Based Additive Manufacturing

Noa Ghersin
(See also M.B.A., Course XV)
Improving Asset Utilization and Manufacturing Production Capacity Using Analytics

Nigel Min Feng Goh
(See also M.B.A., Course XV)
Applications of Risk Pooling for the Optimization of Spare Parts with Stochastic Demand Within Large Scale Networks

Fiona R. Grant
(September, 2019)
Development and Validation of a Systems-level Cost Optimization Tool for Solar-powered Drip Irrigation Systems for Smallholder Farms

Luke A. Gray
Sequestering Floating Biomass in the Deep Ocean: "Sargassum Ocean Sequestration of Carbon" (SOS Carbon)

Rui Guo
(February, 2020)
Single-Component Li_2O Solid Electrolyte Interphase on Lithium: Probing Transport Properties in Battery Environments

Stephen Carrol Guth
(September, 2019)
An Exploration of Data-Driven Techniques for Predicting Extreme Events in Intermittent Dynamical Systems

Rabab Haider
(February, 2020)
Optimal Coordination of Distributed Energy Resources in Smart Grids Enabled by Distributed Optimization and Transactive Energy

Charles Hayden Hasenbank
(See also Naval E., Course II)
The Design, Feasibility and Cost Analysis of Sea Barrier Systems in Norfolk, Virginia and the Comparative Cost of Shoreline Barriers

Alexander R. Hattori
Design of a High Torque Density Modular Actuator for Dynamic Robots

Denton Xiang He
(See also M.B.A., Course XV)
Distribution and Replenishment Optimization between Locations of High and Low Real Estate Cost

Qi He
3D Reconstruction of Human Body via Machine Learning

Julian Heidenreich
(February, 2020)
On the Potential of Convolutional Neural Networks for Estimating the Structural Response of Two-Material Structures

Emily Jane Hsu
(See also S.M., Engineering and Management)
Design of a Measurement Device for Bread Dough Proofing

Rishabh Ishar
(February, 2020)
Estimation of Precursors for Extreme Events Using the Adjoint Based Optimization Approach

Shahrin Jamila Islam
(September, 2019)
Engineering Improvements for Epicardial Drug Delivery Systems

Yohan M. John
(September, 2019)
Observability Analysis of Power Distribution Systems with Distributed Energy Resources Using Correlational Measurements

Austin Robert Jolley
(See also Naval E., Course II)
Design, Construction, and Analysis of a Modular Ship Model and Open-Source Autonomous Surface Vehicle

Kimberly Jung
Exploring Low-Cost Deep Ocean Sensing Utilizing Undersea Cable Networks

Ravitej Reddy Kanapuram
(September, 2019)
(See also M.B.A., Course XV)
Using Data Science and Model Based Systems Engineering to Design and Operate Production Systems

Ha Eun David Kang
Design of Anti-biofouling Lubricant-Impregnated Surfaces (LIS) Robust to Cell-growth-induced Instability

Bobak Toussi Kiani
Quantum Artificial Intelligence - Learning Unitary Transformations

Stephen Bradley Kidwell
(See also S.M.(N.A.M.E.), Course II)
Shipboard Fault Detection, Load Transient Exploration, and Power Simulation

Hyungseok Kim
Development of a Hydrogel-based Biocompatible Platform for Studying Metabolic Interactions between Algae and Bacteria

Sangwoon Kim
Model-free Tracking Control of an Optical Fiber Drawing Process using Deep Reinforcement Learning

Miranda P. Kotidis
(September, 2019)
Experiments with Impulsive Motion of a Foil to Generate Large Lift and Thrust Forces

Rebecca Ann Kurfess
(September, 2019)
A Thermally-Driven Design Methodology for Large-Scale Polymer Additive Manufacturing Systems

Jordan Riley Landis
(See also M.B.A., Course XV)
Benchmarking Environmental Efficiency of Garment Factories to Understand the Value of Real-Time Environmental Data

Alina Dale LaPotin
(September, 2019)
Multi-Stage Adsorption-Based Atmospheric Water Harvesting

Logan Patrick Leahy
Estimating Output Torque via Amplitude Estimation and Neural Drive: A High-Density sEMG Study

Sungkwon Lee
(September, 2019)
Flow Optimization of Ventricular Catheters for Shear Stress-induced Death of Astrocytes

Anne-Claire Elisabeth Marie Le Henaff
(September, 2019)
Time-Variant Solar-Powered Electrodialysis Reversal Desalination for Affordable Off-Grid Clean Water Supply

Victor Julio Leon
(September, 2019)
Self-propulsion of Small Droplets on Thin Liquid Films

Paul Lilin
Drying of Colloidal Suspension Drops: Pattern Formation and Mechanical Deformation

Jing Lin
(February, 2020)
Minimum-Correction Second-Moment Matching: Theory, Algorithms and Applications

Muyuan Lin
(February, 2020)
Deep Learning-Based Approaches for Depth and 6-DoF Pose Estimation

Sandra Qi-Jun Liu
Vision-Based Proprioception of a Soft Robotic Finger with Tactile Sensing

Kuangye Lu
Graphene-assisted Spontaneous Relaxation and Direct CVD Growth of Graphene on III-V Substrate

Shirley Suet-Ning Lu
Design of Dynamically Controlled Desktop Fiber Accumulator with Tension Feedback as Part of Smart Manufacturing Educational Kit

Anthony Douglas Macaluso
(See also S.M.(N.A.M.E.), Course II)
Fuel Tank Corrosion Impacts on Future Fleet Readiness

Caroline Taylor McCue
(September, 2019)
Particle Assisted Protein Crystal Nucleation as a Protein Purification Platform for Pharmaceutical Manufacturing

Erich Paul Meinig
(September, 2019)
An Exploration of Modality Matched Mechanotactile Feedback via a Soft Actuator for Use in Prosthetic Devices

Dante Edward Montgomery
(See also M.B.A., Course XV)
Project-Based Manufacturing: An Approach for Quote Development

John Willard Montgomery III
Calibrating Schlieren Imaging for Understanding Local Film Deformation for a Range of Wetting and Intrusions in Soap Films

Moses Chong-ook Nah
Dynamic Primitives Facilitate Manipulating a Whip

Gregory Thomas Nannig
(February, 2020)
Using Image Processing Methods for a Radar Estimate of Marine Vehicle Odometry

Hans Antoon Nowak II
(See also M.B.A., Course XV)
Strategic Capacity Planning using Data Science, Optimization, and Machine Learning

Elliot D. Owen
(February, 2020)
Design of a Low-Cost High-Performance Flexural Six Degree-of-Freedom Positioning Stage

Aniket Sanjay Patankar
(February, 2020)
Numerical Simulation of Heavy Oil Droplets Mixing in Supercritical Water at Conditions Relevant to Supercritical Water Heavy Oil Upgrading

Nina T. Petelina
(September, 2019)
Exploring the Role of Damping in a Passive Prosthetic Knee through Modeling, Design, and Testing

Danyal Rehman
Monovalent selective electrodialysis: optimizing energetics for desalination and mineral recovery

Taylor Kirstyn Robinson
(See also M.B.A., Course XV)
Leveraging Flexible Manufacturing in Streamlining New Product Launch Processes

Michael Columbus Ross
(See also M.B.A., Course XV)
Reducing Variations in a Highly Constrained Environment in Order to Increase Production Capacity

Tikhon James Ruggles
(See also Naval E., Course II)
Electronics First: Development of a Basic Electronics Course of Study for Naval Engineers

Jana I. Saadi
(February, 2020)
Motivating Sustainable Behavior Through Cognitive Interventions in Product Design

Ryan Joseph Sandzimier
A Data-Driven Approach to Bucket-Filling Control for Autonomous Excavators

William James Sawyer
(February, 2020)
Toward Improved Manufacturing of Carbon Nanotubes by Microplasma Synthesis of Catalyst Nanoparticles

Aaron Paul Schlenker
Integrated Optimization of Thermoelectric Systems

Carolyn Sheline
(September, 2019)
Lowering the Cost of Solar-Powered Drip Irrigation Systems for Smallholder Farmers Through Systems-Level Modeling, Optimization and Field Testing

Brian Asanuma Stanfield
(See also Naval E., Course II)
Incorporating Contact Management and Marine Dynamics in Decentralized Auction Bidding for Autonomous Surface Vehicles

Tingyu Su
Properties of Off Stoichiometric Yttrium Iron Garnet

Wenhui Tang
Collective Cellular Behavior on Curved Surface

Adriane Ann Turner
(See also M.B.A., Course XV)
Evaluation of Automated Storage and Retrieval in a Distribution Center

Juliet Wanjiru Wanyiri
(See also S.M., Engineering and Management)
Structural and Aesthetic Design Applications of Flexible, Thin-film Solar Cells to Power Off-Grid Tensile Structures

Benjamin Stone Weinreb
A Novel Magnetically Levitated Interior Permanent Magnet Slice Motor

Aaron Michael West, Jr.
Towards Non-Invasive Measurement of Human Manipulation during a Complex Physical-Interaction Task: Wire-Harnessing

David Travis Kent Woodruff
(See also M.B.A., Course XV)
Stepping Toward a Smarter Factory at Canam

Sagar Pandey Yadama
(See also M.B.A., Course XV)
Data Driven Risk Assessment for Turbine Engine Programs

Paige Denise Youngerman
(See also M.B.A., Course XV)
Impact of Part Proliferation on a High Mix Low Volume Manufacturing Environment

Wang Zhang
(See also S.M., Course VI)
Modeling Internal Combustion Engine Three-Piece Oil Control Ring Coupling Reduced Order Oil Transport Based on Neural Network

Raphael Matan Zonis
Development of an Automated Microfluidic System for the Loading and Unloading of Cryoprotectants from Mammalian Oocytes

Master of Science in Naval Architecture and Marine Engineering

Course II
Department of Mechanical Engineering

Julia Elizabeth Cumming
(See also S.M., Course II)
The Practicality of Adaptable Geometry Centrifugal Pumps in U.S. Navy Systems

Raz Elhassid
(February, 2020)
(See also S.M., Course II)
Experimental Verification of Biomimetically Designed Ventral Fins for AUVs

Stephen Bradley Kidwell
(See also S.M., Course II)
Shipboard Fault Detection, Load Transient Exploration, and Power Simulation

Anthony Douglas Macaluso
(See also S.M., Course II)
Fuel Tank Corrosion Impacts on Future Fleet Readiness

Master of Science in Materials Science and Engineering

Course III
Department of Materials Science and Engineering

Victor Kenneth Champagne III
(September, 2019)
Energy Dissipation in Shape Memory Zirconia Particles, Packings, and Composites

Gautham Muthusamy
Effect of Cooling Rate During Solidification of Aluminum-Chromium Alloy

Jee Soo Yoo
(September, 2019)
Computational Study on Controlling the Optical Properties of Solar Thermal Fuels

Master of Engineering in Electrical Engineering and Computer Science

Course VI-P

Department of Electrical Engineering and Computer Science

Lena A. Abdalla
(February, 2020)
Classification of Computer Programs in the Scratch Online Community

Aradhana Adhikari
3D Visualization Tool for Custom Electronics Fabrication Using Laser Cutter

Walaa M. Alkhanaizi
A Sleep Mask for Conducting Sleep Studies

Julian A. Alverio
(February, 2020)
Zero Shot Learning Robotic Tasks with Language Integration

David James Amirault
(See also S.B.,Course VI-3)
Partition WaveNet for Deep Modeling of Automated Material Handling System Traffic

Christopher Z. Au
Characterization of Deep Neural Network Feature Space For Inverse Synthetic Aperture Radar Automatic Target Recognition

Emmanuel M. Azuh
(September, 2019)
Towards Bilingual Lexicon Discovery From Visually Grounded Speech Audio

Annamarie E. Bair
(September, 2019)
Molecular Graph Self Attention and Graph Convolution for Drug Discovery

Brandon J. Baraban
(See also S.B., Course VI-3)
Learning Rules for Task and Motion Planning

Sravya M. Bhamidipati
(September, 2019)
Examining Approaches to Quantify the Role of People, Policy, and Process in Cyber Risk Management

Nikhil Bhatia
Using Transfer Learning, Spectrogram Audio Classification, and MIT App Inventor to Facilitate Machine Learning Understanding

Sanchit Bhattacharjee
(September, 2019)
Integrating SLAM-DUNK and Variable Rate Particle Observers for Fast Multi-Hypothesis SLAM

Angie W. Boggust
Unsupervised Audio-Visual Learning in the Wild

Jacqueline M. Bredenberg
Optimizations for Performant Multiverse Databases

Nithin Buduma
Identifying Relevant Molecular Substructures for Property Prediction

Rares-Darius Buhai
Learning Restricted Boltzmann Machines with Few Latent Variables

Katherine A. Camenzind
Non-Contact Voltage Monitoring of Three-Phase Power Cables

Giulio Capolino
Methods to Analyze Spatiotemporal Dynamics of Electrochemically Recorded Striatal Dopamine

Alan E. Casallas
(September, 2019)
Contactless Current and Voltage Detection Using Signal Processing and Machine Learning

Christos Nestor Chachamis
A Dimension Reduction Technique to Preserve Nearest Neighbors on High Dimensional Data

Julian A. Chacon-Castaño
(February, 2020)
Exploration of Alternative Algorithms for Multi-Channel Acoustic Echo Cancellation

Adelaide W. Chambers
Longitudinal VoxelMorph: Spatiotemporal Modeling of Medical Images

Raphael Chang
(February, 2020)
Significance of Omnidirectional Fisheye Cameras for Feature-based Visual SLAM

Shivani Chauhan
(September, 2019)
A Mobile Platform for Non-invasive Diabetes Screening

Alex L. Chen
JiboChat: Interactive Chatting Through a Personal Robot

Brian Chen
RiffShuffle: A Flexible Interface for Interactive Automatic Harmonization

Bryan Chen
Relieving Label Requirements Through Weakly Supervised Learning

Daibo Chen
(September, 2019)
RF Energy Harvesting Using Carbon Nanotube Components

Run Chen
Recovery of Functional Projections Through Unsupervised Learning

Alan D. Cheng
Low Power Time-of-Flight Imaging for Augmented Reality

Rayden Yongxiang Chia
SPAR: A Robust SDN-Based Architecture for Autonomous Network Active Defense

Kevin K. Cho
(September, 2019)
Three Dimensional Editor for App Inventor

Lauren W. Clayberg
Web Element Role Prediction from Visual Information Using a Novel Dataset

Zachary L. Collins
Active Database Interface for Video Search

Osmany L. Corteguera
Airborne Collision Avoidance with Three-Dimensional Policy

Yang Dai
(September, 2019)
Intergrated Multiparametric Deep Spatial Phenotyping of Mouse Models of Lung Adenocarcinoma

Sourav Das
(September, 2019)
Predicting Unknown Adverse Drug Reactions Using an Unsupervised Node Embedding Algorithm

Leo Ramón Nathan de Castro
(February, 2020)
Practically Efficent Multi-Party Computation Protocols from Homomorphic Encryption

Miguel Ángel del Río Fernández
(February, 2020)
Structure and Geometry in Sequence-Processing Neural Networks

Elizabeth A. DeTienne
Multi-Digit Processing and Contextualized Analysis on the Symbol Digit Test

Jared J. Di Carlo
(February, 2020)
Software and Control Design for the MIT Mini Cheetah Quadruped Robot

Emily H. Do
(September, 2019)
An Entropy-based Approach to Network Attack Classification with Deep Neural Network

Jamell A. Dozier
(February, 2020)
Emergent Patterns of Task-Specific Neurons in Deep Neural Networks

Sabrina M. Drammis
(February, 2020)
Understanding the Role of Striosomes in Learning a Decision-making Task

Rogers S. Epstein
Local Access to Sparse Connected Subgraphs Via Edge Sampling

Ivan Tadeu Ferreira Antunes Filho
(September, 2019)
SAT Infrastructure

Roberto Daniel Filizzola Ortiz
Robust Algorithms for Analysis of Traveling Wave Motions of the Tectorial Membrane

Sean Cameron Burrows Fraser
Computing Included and Excluded Sums Using Parallel Prefix

Allison Fu
A Vision-Language Model for Translation

Paolo Y. Gentili
(September, 2019)
Active Learning Using Meta-Learned Priors

Sydney Marie Gibson
Waddle: A Proven Interpreter and Test Framework for a Subset of the Go Semantics

Leah G. Goggin
(September, 2019)
Runtime Execution Tracing and Alignment with PANDA

Zoë P. Gong
Promoting Group Self-Facilitation in Online Video Conferences

Udgam Goyal
(February, 2020)
Leveraging Machine Learning to Predict Playcalling Tendencies in the NFL

Liam M. Green
Electronics for Flow Through Electrode Capacitive Desalination

Alexander G. Grossman
(See also S.B., Course VI-2)
Phase Correction in Long-Range Temperature Forecasting

Dylan E. Grullon
(September, 2019)
Disentangling Time Constant and Time Dependent Hidden State in Timeseries with Variational Bayesian Inference

Winter J. Guerra
(September, 2019)
Photorealistic Sensor Simulation for Perception-driven Robotics using Virtual Reality

Michael H. Gump
Unsupervised Methods for Evaluating Speech Representations

Hairuo Guo
(September, 2019)
Steps Towards Proof Construction Using Reinforcement Learning: Environments and Models for Hypothesis-Posing as Subtask Creation

Arjun R. Gupta
(See also S.B., Course VI-3)
Automated Neural Network Output Monitoring

Driss Hafdi
(September, 2019)
Mixed Precision Architecture for Flexible Neural Network Accelerators

Ruochen Hao
Efficient Exploration of Reinforcement Learning in Non-Stationary Environments with More Complex State Dynamics

Joshua K. Hellerstein
RF-Based Wireless Detection and Monitoring of Human Itch

Trevor F. Henderson
(September, 2019)
Information-Theoretic Robotic Exploration

Rawn T. Henry
A Framework for Computing on Sparse Tensors Based on Operator Properties

Timothy G. Henry
(February, 2020)
Generalization of Deep Neural Networks to Unseen Attribute Combinations

John Heyer
Inference of Point Sources from NuSTAR X-Ray Observations Using Probabilistic Catalogs

Helen W. Ho
Neural Physics Simulation through Volumetric Reconstruction

Felipe Alex Hofmann
Tracer: A Machine Learning Approach to Data Lineage

Christie Hong
Ecological Values-Based Recommender System for Physical Locations

Jeffrey H. Hu
(September, 2019)
Scaling ADE20k: Cluster-based Approach for Large-scale Image Segmentation Collection

Matthew S. Hutchinson
(See also S.B., Course VI-3)
Applying High Performance Computing to Early Fusion Video Action Recognition

Mitchell D. Hwang
(February, 2020)
Temperature Prediction Using Thermal Fluctuations from Wireless Sensor Networks in Adaptive Filter Model

Sabrina Elizabeth Ibarra
(September, 2019)
Pipeline for Semi-automatic Quantification of Morphologic Heterogeneity iin Endothelial Cells

Shreyan Jain
(See also S.B., Course VI-3)
Developing a Cloud-Based Secure Computation Platform for Genomics Research

Christina Xinyue Ji
(September, 2019)
Modeling Progression of Parkinson's Disease

Yuge Ji
(September, 2019)
Cell Line Sensitivity to BCNU Damage

Magnus H. Johnson
Deep Rigging: Automatic Character Skinning for Animation

Srinivas Kaza
(September, 2019)
Differentiable Volume Rendering using Signed Distance Functions

Arjun Sunil Khandelwal
(September, 2019)
Learning Embeddingds

Houssam Kherraz
Leveraging Dataset Examples for the Interpretation of Black-Box Deep Learning Models

Bruke Mesfin Kifle
Experiential Ethics: Engagement in Computing Education

Alex H. Kimn
A Syntactic Rule-based Data Synthesis Framework for Japanese GEC

Nicholas E. Klugman
(February, 2020)
Modeling and Design of Magnetic Flux Compression Generators

Alexander W. Knapp
AirGuardian: A Parallel Autonomy Approach to Self-Flying Planes

Sean Ko
Optimizing a Deep Learning Approach for Automatic Segmentations for White Matter Lesions

Isaac Kontomah
(February, 2020)
Towards Abstract Program Interpretation Using Encoder-Decoder Neural Networks

Dimitrios Koutentakis
(February, 2020)
Modeling Human Driving Behavior

Severyn Kozak
Understanding and Eliminating Software Performance Variability

Danielius Kramnik
(February, 2020)
Scaling Trapped-Ion Quantum Computers with CMOS-Integrated State Readout

Agni Kumar
(See also S.B.,Course VI-3)
Learning Infection Influence Using Self-Excitatory Temporal Point Processes

Alex Licari LaGrassa
(September, 2019)
Selecting Appropriate Reinforcement-learning Algorithms for Robot Manipulation Domains

Jason Lam
(See also S.B.,Course VI-3)
Applying Sampling and Predicate Pushdown in an Interactive Data Exploration System

Quang Huy Le
(February, 2020)
GAN Mask R-CNN: Instance Semantic Segmentation Benefits from Generative Adversarial Networks

Allen J. Lee
Interfaces for Exploring Human Memorability and Cognition

Chungmin Lee
Question Generation Workflow: Incorporating Student-generated content and Peer Evaluation

Elizabeth S. Lee
(September, 2019)
A Two-fold Validation of the Sensitivity of a Coaxial Probe of Measuring Dielectric Permittivity in a Multilayered Tissue Model, Using Finite Element Method Simulation and Tissue Phantom Measurements

FengPing Angela Leong
(February, 2020)
Developing a Simulator to Aid in the Design of a Safety Interlock for Self-Driving Cars

Jiahao Li
(September, 2019)
Color Reclamation for Heap Memory Coloring Scheme in PIPE Tagged-Memory Architecture

Rui Li
(February, 2020)
G-Network for Outcome Prediction Under Dynamic Intervention Regimes

Christina C. Liao
Software Pipeline for End- to- End Fabrication of Functional Devices

Jing C. Lin
Motion Aware Depth Completion for Aerial Drones with Deep Neural Networks

Alexander H. List
(September, 2019)
Assessing Multi-rotor UAV Controllability in Low Altitude Fine-Scale Wind Fields

Wilson Louie
Validation of a Novel Systematic Computational Workflow for CRISPR/Cas9-Induced Theraputic Exon Skipping

James Peter Thomas Lovejoy
An Empirical Analysis of Chain Reorganizations and Double-Spend Attacks on Proof-of-Work Cryptocurrencies

Sophia Y. Luo
(See also S.B.,Course VI-3)
Identifying Investors with Sentiment-Based Investment Strategies and Predicting Their Trading Behavior

Alexander J. Lynch
Framework for the Distributed Execution of Behaviors in Swarms of Autonomous Drones

Israel R. Macias
Verity Ledger: Improving Data Quality and Ensuring Data Authenticity in Publicly-Built Open Datasets

Jennifer Lissette Madiedo
How Will it End? OPERA As an Approach to Prediction

Cheahuychou Mao
(September, 2019)
Understanding Language by Imagining Possible Worlds

Elizabeth E. Martin
(February, 2020)
Determining Patterns of Cancer Drug Resistance from Rapid Autopsy Patients

Jennifer A. McCleary
(February, 2020)
Learning Risk Models for Pancreatic Cancer from Electronic Health Records

Haripriya P. Mehta
(See also S.B., Course VI-2)
Secure Inference of Quantized Neural Networks

Jesse M. Michel
Sensitivities for Guiding Refinement in Arbitrary-Precision Arithmetic

So Yeon Min
Towards Knowledge-Based, Robust Question Answering

John Mofor
(September, 2019)
PyMedServer: A Server Framework for Mobile Data Collection and Machine Learning

Suzanne A. Mueller
(February, 2020)
Sparse Tensor Transpositions in the Tensor Algebra Compiler

Ayrton D. Munoz
(September, 2019)
Development of Vertical Bulk Gallium Nitride Power Devices

Ajinkya Kishore Nene
(See also S.B., Course VI-3)
Deep Learning Approaches to Universal and Practical Steganalysis

Rupayan Neogy
Synchronized Vega-Lite: Designing Collaborative Visualization

Anelise P. Newman
Human-Computer Perception: Modeling Visual Perceptual Attributes

Hoang Nguyen
Modeling Acoustic Cues to Distinctive Features in a Lexical Speech Analysis System

Lucas D. Novak
Using Smart Systems to Incentivize Sustainable Behaviors of Individuals

Cattalyya Nuengsigkapian
ChromoUpdate: Optimization Technique for Controlling Color-Changing Materials

Domenic Jeffrey Nutile
Using Profiling to Improve the Performance of Automatically Parallelized Programs

Kwabena A. Ofori-Atta
Preliminary Evaluation of a Mobile Platform for the Non-Invasive Screening and Prevention of Diabetes

Inioluwa A. Oguntola
(September, 2019)
Deep Learning in the TeleICU Environment

Temitope Oluwatosin Olabinjo
Click-based Ultrasonic Gesture Recognition

Suzanne O'Meara
(See also S.B., Course VI-1)
Development of a Switched-Capacitor Multi-Level Inverter for EAD Applications

Adedotun J. Oseni-Adegbite
Automatic Analysis of Meeting Conversations

Victoria Song Ouyang
(February, 2020)
Scalable Integrated Screening Tools for Cardiovascular Disease

Mira Anita Partha
A Novel Method for Multilevel Autonomous Clustering (MAC) for Anomaly Detection in Distributed Systems

Aman S. Patel
StructureQTL: Novel QTL to Associate SNPs and Neighborhood Regulatory Structure

Jason G. Paulos
(See also S.B., Course VI-3)
Investigating Decentralized Management of Health and Fitness Data

Anthony Bo Peng
Light Source Relighting for Indoor Scene Photos with Deep Neural Networks

Ignacio Perez Bedoya
(See also S.B.,Course VI-2)
Robotic Grasping using POMDPs and Machine Learning

Mai Phuong Pham
Machine Comprehension for Clinical Case Reports

Carla N. Pinzón
(February, 2020)
Comparison of Power Electronics Inverters for Underwater Applications

Srijith Sreekumar Poduval
(See also S.B., Course VI-3)
Simulating Income Segregation Through Behavioral Adjustments Using Mobile Location Data

Smriti Pramanick
(September, 2019)
Using Dynamic Time Warping to Improve the Classical Music Production Workflow

Ryan T. Prinster
(September, 2019)
Modeling Rats Learning Compositional Tasks

Korrawat Pruegsanusak
Understanding Drivers' Risk Behaviors from Dashcam Videos

Sebastian Andrés Quilter
Software Design for Dual-Computer Configuration of Aerial Robots

Abraham Quintero
(September, 2019)
REACT: Risk Evaluation Assessment & Cooperation Terminal

Meena S. Rajan
(February, 2020)
Learning and Analysis of Matrix and Striosomal Cell Activity to Predict Mouse Behavior in 'T' Maze

Archana Ram
(February, 2020)
Diverse Primary and Secondary Structural Features are Associated With Y Complex-Dependent mRNA Maturation in B. subtilis

Sunayana Rane
(See also S.B., Course VI-3)
Learning with Curricula for Sparse-Reward Tasks in Deep Reinforcement Learning

Kavya Ravichandran
(See also S.B., Course VI-2)
A Sublinear Time Algorithm for Testing Heavy-Tailed Distributions

Justin P. Restivo
(February, 2020)
A Zero Kernel Operating System: Rethinking Microkernel Design by leveraging Tagged Architectures and Memory-Safe Languages

Valerie G. Richmond
"Certified Control" Safety Architecture for Autonomous Vehicles: Applications with LiDAR

Rodrigo I. Ruiz
(February, 2020)
Geometric Matrix Completion with Graph Attention Networks

Wesley J. Runnels
Incorporating Automated Feature Engineering Routines into Automated Machine Learning Pipelines

Basil N. Saeed
Learning Directed Graphical Models with Latent Variables

Tossaporn Saengja
Large-Scale Network: A Scalable Learning Algorithm and Visualization

Janelle C. Sands
Efficient Optical Music Recognition Validation Using MIDI Sequence Data

Nilai M. Sarda
(See also S.B., Course VI-3)
Towards Anomaly Detection in Accelerator Physics

Sarbari Sarkar
(See also S.B., Course VI-3)
Gaze-Tracking Analysis for Cognitive Screening and Assessment

Martin F. Schneider
Data-Efficient Reinforcement Learning Through World-Modeling and Meta-Learned Exploration Strategies

Ryan Michael Senanayake
(February, 2020)
A Unified Iteration Space Transformation Framework for Sparse and Dense Tensor Algebra

Faysal Shair
(September, 2019)
Improving Piezoelectric Energy Harvesting Power Bandwidth with the Bias-flip Method

Ayush Sharma
AIKIDO: Toward Straggler Mitigation within Distributed Machine Learning in Data Centers

Andrew L. Shea
Patient Clustering Using Electronic Health Records

Luke Shimanuki
(See also S.B.,Course VI-3)
Motion Planning under Obstacle Uncertainty

Michal M. Shlapentokh-Rothman
Cyber Threat Hunting

Yasmin H. Siahpoosh
Investigating Mechanisms of Biophysical Diversity Between Phasic and Tonic Motor Neurons

Claire M. Simpson
(September, 2019)
Perturbations in Kinase Signaling and Gene Expression Networks in Human Disease

Anna Sinelnikova
Cues to Comparison Classes in Child-Directed Language

Aaron J. Sipser
Video Ingress System for Surveillance Video Querying

Chandler B. Squires
(September, 2019)
Casual Structure Learning

Keren Sarah Starobinski
(February, 2020)
Predicting Medicine Inpatients' Discharges at Massachusetts General Hospital

Zygimantas Straznickas
Verified Cryptographic Bootloader in Coq

Rishi S. Sundaresan
(See also S.B., Course VI-3)
Pixel-Based Object Motion Detection and Tracking with a Moving Camera

Jennifer F. Switzer
Preventing IPC-Facilitated Type Confusion in Rust

Adrian Reginald C. Sy
A Fast 2D Packing Procedure for the Interactive Design and Preparation of Laser-Cut Objects for Fabrication

Melinda Dora Szabo
Adaptive Gain Spatial Receiver for Wide Dynamic Range Communication Links

Tiffany L. Tang
(September, 2019)
Security and Performance Analysis on Custom Memory Allocators

Ertem Nusret Taş
(September, 2019)
Coflow Scheduling in Data Center Networks

Evan S. Tey
Unsupervised Generative Models for Stellar Spectra

Tristan Andrew Fraser Thrush
(September, 2019)
SAL: A Self-Aware Learning System

Sunny Tian
(See also S.B., Course VI-3)
Integrating Discussion and Summarization in Collaborative Writing

Robert Hall Tran
(September, 2019)
Online Prediction with Bike Sharing Systems

Timothy F. Truong, Jr.
Interpretable Deep Learning Framework for Binding Affinity Prediction

Andrew Yunta Tsai
Zorro: A Model Agnostic System to Price Consumer Data

Christine M. Vonder Haar
(February, 2020)
Understanding Learner Engagement in Massive Open Online Courses

Vincent Charles Vostatek
Predicting Factors that Affect Student Performancein MOOC and On-Campus Computer ScienceEducation

Austin T. Wang
(February, 2020)
Allele-Specific QTL Fine-Mapping with Plasma

Austin Taylor Wang
(See also S.B., Course VI-3)
Real-time Computer-Aided Polyp Detection and Localization for Clinical Applications

Katherine Yuchen Wang
(February, 2020)
A Machine Learning Framework for Predictive Maintenance of Wind Turbines

Xiaomin Wang
Exploring Automated Methods for Supporting Worker Reskilling

Ziheng Wang
Automatically Optimizing Sparse Tensor Algebra Programs

Mattie F. Wasiak
(See also S.B., Course VI-3)
Leveraging Clinical Data to Optimize Oxygen Delivery to the Preterm Infant

Tyler J. Wasser
Roboat Routing and Itinerary Planning for Tourists

Kuo-An A. Wei
Identifying Non-Robust Features in Image Classification

Rebecca E. Weinberger
Development of a Co-Evolution Assistant to Limit Database Decay

Alyssa F. Weiss
Developing Automated Tools to Analyze Synaptic Calcium Events Using Machine Learning Tools

Kevin Weng
Examining Conversational Programming Design Needs with Convo, a Voice-First Conversational Programming System Using Natural Language

Malcolm X. Wetzstein
(September, 2019)
Custom and Interactive Environments in Starlogo Nova for Computational Modeling

Jordan M. Wick
Using Existing Knowledge for Transfer and Regularization for Program Synthesis with Genetic Programming

Diana Wofk
Fast and Energy-Efficient Monocular Depth Estimation on Embedded Systems

Kifle H. Woldu
Encouraging GAN Diversity via Evolutionary Computing

Albert Wu
Sampling-Based Planning for Hybrid Systems via Reachability Guidance and Policy Approximation

Menghua Wu
Few-Shot Text Classification with Distributional Signatures

Nicholas T. Wu
(February, 2020)
Inductive Logic Programming with Gradient Descent for Supervised Binary Classification

Shang-Yun Wu
Regular Graphical Pattern Detection and Its Applications

Aaron W. Wubshet
Investigation of a USRP Platform for Quantum Sensing and Control

Wings T. Yeung
(February, 2020)
Characterization of Nanophotonic Grating Structures

Grace Qingyang Yin
Parallel Exception Handling in Cilk

Katherine W. Young
(February, 2020)
Dynamic Treatment Regimes for Congestive Heart Failure: A Neural Fitted Q-Iteration Approach

Justin K. Yu
Identifying Outlier Opioid Consumption Using Machine Learning and Peri-Operative Data

Gina Y. Yuan
(September, 2019)
Scalable Fault Tolerance for High-Performance Streaming Dataflow

Erica J. Yuen
Paper Dreams: Real-Time Collaboration with Machine Learning for Artistic Expression

Xavier Alexander Zapien
Electrical System Design for Wafer-Like Satellite

Kevin Zhang
(February, 2020)
Tiresias: A Peer to Peer Data Science Marketplace

Mary Z. Zhong
Teaching and Improving Code Review in the Classroom

Zachary J. Zumbo
(February, 2020)
Genetic Optimization Applied to Via and Route Strategy

Master of Engineering in Computer Science and Molecular Biology

Course VI-7
Department of Electrical Engineering and Computer Science

Priya P. Pillai
Accounting for Uncertainty: Robust Design Space Exploration and Optimization

Master of Science in Electrical Engineering and Computer Science

Course VI
Department of Electrical Engineering and Computer Science

Raj Agrawal
(February, 2020)
Minimal I-MAP MCMC for Scalable Structure Discovery in Causal DAG Models

Ali Said Alrayes
(See also M.B.A., Course XV)
Transmission System Overvoltage Mitigation Through the Use of Distributed Generation (DG) Advanced Inverters

Nicolas S. Arango
(February, 2020)
Sequence-Phase Optimal (SPO) ΔB_0 Field Control for Lipid Suppression and Homogeneity for Brain Magnetic Resonance Spectroscopic Imaging

Alex Christopher Barksdale
Lithium Extraction from Brines Using Ion Concentration Polarization

Serena Lynn Booth
Explainable AI for Robot Teaching and Learning

Dylan Maxwell Cable
Computational and Statistical Methods for Spatial Transcriptomics

Francis Cangialosi
(September, 2019)
Aggregate Internet Traffic Control

Pin-Yi Chen
(See also S.M., Course II)
Resource Competition in CRISPR-Mediated Gene Regulation

Nadiia Chepurko
(February, 2020)
ARDA: Automatic Relational Data Augmentation for Machine Learning

Charles William Chimento III
(See also S.M., Technology and Policy Program)
Innovation in the US Air Force

Chanyeol Choi
(September, 2019)
Large-Scale Neuromorphic Computing Hardware for Analog AI Enabled by Epitaxial Random Access Memory

Matthew Ruiyan Chua
(September, 2019)
Electroluminescence Characterization of Organometallic Perovskite Solar Cells

Rumen R. Dangovski
Applied NLP Inspired by Fundamental Mathematics and Physics

Durgesh Das
(See also M.B.A., Course XV)
Assessing Sales Floor Capacity and Replenishment Strategy

Marc de Cea Falcó
Milivolt Silicon Photonic Modulators for Cryogenic Applications

Hannah R. Diehl
(February, 2020)
Evaluating Summarization and Inference Techniques for High Energy Physics Applications

Jialin Ding
Learning Multi-dimensional Indexes

Mustafa Doğa Doğan
Identifying 3D Prints Using Slicing Parameters

Yilun Du
Online Optimization with Energy Based Models

Lijie Fan
Human Activity Analysis Using Radio Signals

Adam Joshua Fisch
(February, 2020)
Working Hard or Hardly Working: Challenges of Integrating Typology into Neural Dependency Parsers

Joshua Samuel Fried
Overcoming Scalability Bottlenecks in Shenango

Austin James Gadient
(February, 2020)
Automatic Exploitation of Fully Randomized Executables

Mingye Gao
Application of Graphene in Designing Tunneling Nanoelectromechanical Switches

Wei Gao
Integrated Perception, Planning and Feedback Control for Generalizable Robotic Manipulation

Ofer Grossman
Reproducibility and Pseudo-Determinism in Log-Space

Nava Haghighi
(See also S.M., Engineering and Management)
Self-Interfaces: Utilizing Real-Time Biofeedback in the Wild to Elicit Unconscious Behavior Change

Hao He
(February, 2020)
Deep Learning for Distributed Circuit Design

Kyle Lee Hogan
(February, 2020)
Security Analysis of Tor Over QUIC

Rachel Mara Holladay
(September, 2019)
Force-and-Motion Constrained Planning for Tool Use

Justin Tony Hou
(September, 2019)
Strong Coupling between Microwave Photons and Nanomagnet Magnons

Tzu Ming Hsu
Automatic Longitudinal Assessment of Tumor Responses

Nathan Ray Hunt
(February, 2020)
Batch Bayesian Optimization

Mohamed Ibrahim Mohamed Ibrahim
(February, 2020)
Chip-Scale Quantum Magnetometry via CMOS Integration with Diamond Color Centers

Siddhartha Jayanti
Multiplayer Colonel Blotto Game

Yichen Jia
(See also S.M.Arch.S., Course IV)
Constructing Virtual Reality Exhibitions with Multimodal Interactions

Iksung Kang
On the Use of Machine Learning for Obtaining the Inverse in the Coherent Modulation Imaging Scheme with Photon-Starved Inputs

Irene Agnes Kuang
Equivalent-Charge-Based Optimization of Spokes-and-Hub Permanent Magnets for Hand-Held MR Imaging

William Henry Kuszmaul
Fair Buffer Management: Achieving Optimal Backlog in Multiprocessor Cup Games

Christian Lee Lau
Very-Large-Scale-Integration of Complementary Carbon Nanotube Field-Effect Transistors

Kyungmi Lee
Improved Methodology for Evaluating Adversarial Robustness in Deep Neural Networks

Lukas Lesina Debiasi
(See also S.M.Arch.S., Course IV)
Illuminating Preference: Rethinking Colored Lighting in Workplace Environments

Peter Zhi Xuan Li
High-Throughput Computation of Shannon Mutual Information on Chip

Tianhong Li
Human Sensing and Identification Using RF Signals

Yunzhu Li
Learning Compositional Dynamics Models for Model-Based Control

Qianhui Liang
(February, 2020)
(See also S.M.Arch.S., Course IV)
Machine Mediated Human Perception

Yujun Lin
Mixed-Precision NN Accelerator with Neural-Hardware Architecture Search

Zhijian Liu
Hardware-Efficient Deep Learning for 3D Point Cloud

Yiyue Luo
Discovering the Patterns of Human-Environment Interactions Using Scalable Functional Textiles

James Carter Minor
Design and Fabrication of a Fully 3D Printed Light Sensor Array

Rishabh Mittal
(February, 2020)
A Sampling Jitter Tolerant Continuous-Time Pipelined ADC

Baichuan Mo
(See also S.M., Transportation)
Network Performance Model for Urban Rail Systems

Andrew Robert Moorman
(February, 2020)
(See also S.M.Arch.S., Course IV)
Machine Learning Inspired Synthetic Biology: Neuromorphic Computing in Mammalian Cells

Zachary James Newman
A High-Bandwidth, Low-Latency System for Anonymous Broadcasting

Benny Siu Hon Ng
(See also S.M., Technology and Policy Program)
A Machine Learning Approach to Evaluating Renewable Energy Technology: An Alternative LACE Study on SolarPhoto-Voltaic (PV).

Tin Danh Nguyen
Non-Nested Finite Approximations for Completely Random Measures

Michael Karl Oberst
(September, 2019)
Counterfactual Policy Introspection Using Structural Causal Models

Moses Teddy Ort
(February, 2020)
MapLite: Autonomous Navigation in Rural Environments Without Detailed Prior Maps

Bora Ozaltun
(See also S.M., Technology and Policy Program)
Learning from Supply Shocks in the Energy Market: Evidence from Local and Global Effects of the Shale Revolution

Soyun Park
(February, 2020)
Opportunities for Automating Email Processing: A Need-Finding Study

Kaidong Peng
Quantum Efficiency of Josephson Traveling Wave Parametric Amplifiers with Many-Mode Processes

James Patrick Peraino
(See also S.M.Arch.S., Course IV)
Architectural Epidemiology: A Computational Framework

Joshua Andrew Perozek
(February, 2020)
Vertical Gallium Nitride Fin Transistors for RF Applications

Bidusha Poudyal
(See also M.B.A., Course XV)
Predictive Analysis of Installation and Operational Qualification Issues vs. Process Severity Events

Victor Quach
Blank Language Models for Sequence Modeling

Marlyse H. Reeves
(February, 2020)
Magellan: A Robust Executive Enabling Long Horizon Multi-Agent Campaigns

Oliver Brian Regele
(See also M.B.A., Course XV)
Applied Discrete Event Simulation for Root Cause Analysis and Evaluation of Corrective Process Change Efficacy within Vaccine Manufacturing

Alexander Dominic Renda
Comparing Rewinding and Fine-Tuning in Neural Net Pruning

Maryann Z. Rui
Auctions of Digital Goods with Externalities

Gilhyun Ryou
Multi-Fidelity Black-Box Optimization for Time-Optimal Quadrotor Maneuvers

Mayuran Saravanapavanantham
(February, 2020)
Large-area Lightweight Organic Photovoltaics

Zeyuan Shang
(February, 2020)
Democratizing Data Science Through Interactive Curation of ML Pipelines

Jessica Shi
Parallel Algorithms for Butterfly Computations

Thomas Scott Silver
Few-Shot Bayesian Imitation Learning with Logical Program Policies

Vibhaalakshmi Sivaraman
(September, 2019)
High-Efficiency Cryptocurrency Routing in Payment Channel Networks

Jamison M. Sloan
Controlling Spins with Surface Magnon Polaritons

Shashank Srikant
Vulcan: Classifying Vulnerabilities in Solidity Smart Contracts Using Dependency-Based Deep Program Representations

Austin James Stromme
Wasserstein Barycenters: Statistics and Optimization

Suleeporn Sujichantararat
(September, 2019)
Cybersecurity Vulnerabilities in Operational Technology

Tuo Sun
(February, 2020)
(See also S.M.Arch.S., Course IV)
Synthesizing 3D Morphology from a Collection of Urban Design Concepts

Jialu Tan
(See also M.C.P., Course XI)
Using Machine Learning to Identify Populations at High Risk for Eviction as an Indicator of Homelessness

Shaoying Tan
(See also S.M.Arch.S., Course IV)
Space is the Interface: Evaluating Spatial Knowledge Acquisition in Virtual Reality from the Perspective of Locomotion

Schrasing Tong
Detecting Bias in Image Classification Using Model Explanations

Arsen Vasilyan
Approximating the Noise Sensitivity of a Monotone Boolean Function

Clinton Jia Wang
Spatial-Intensity Transform GANs for High Fidelity Medical Image-to-Image Translation

Hanrui Wang
Efficient Algorithms and Hardware for Natural Language Processing

Mien Wang
Mathematical Analysis of Static and Plastic Biological Neural Circuits

Zoë Jewell Wolszon
(See also M.B.A., Course XV)
Improving Predictability of Cell Culture Processes During Biologics Manufacturing Scale-Up through Hybrid Modeling

Yannan Wu
(February, 2020)
A Systematic Approach for Architecture-Level Energy Estimation of Accelerator Designs

Hanshen Xiao
(September, 2019)
Local Differential Privacy in Decentralized Optimization

Qingyun Xie
Gallium Nitride Electronics for Cryogenic and High Frequency Applications

Junshen Xu
Online, Low-Latency Decision Making for Fetal Magnetic Resonance Imaging with Machine Learning

Lei Xu
(February, 2020)
Synthesizing Tabular Data using Conditional GAN

Zihao Xu
Learning Agents in the Market with Adverse Selection

Mantian Xue
(September, 2019)
Chemical and Biomedical Sensors Using Two Dimensional Materials

Jianqiao Yang
Simplifying Non-Ane Filtered Reductions with Polyhedral Model

Lei Yang
Design and Implementation of a High Performance Blockchain System

Yuzhe Yang
On Exploiting Structures for Deep Learning Algorithms with Matrix Estimation

Wenjie Yao
(February, 2020)
Fundamental Limits to Local Density of States in Absorptive System

Yufeng Ye
Nonlinearity Engineering with the Quarton

Tiancheng Yu
Learning in MDP with Adversarial Reward

Mengyang Yuan
(February, 2020)
GaN Technology for High Temperature Applications

Paul Zhang
(February, 2020)
Octahedral Fields for Feature-Aligned Cross-Fields

Pengxiang Zhang
Quantitative Study on Current-Induced Effects in an Antiferromagnetic Insulator/Pt Bilayer Film

Wang Zhang
(See also S.M., Course II)
Modeling Internal Combustion Engine Three-Piece Oil Control Ring Coupling Reduced Order Oil Transport Based on Neural Network

Yao Zhao
(February, 2020)
(See also M.C.P., Course XI)
Deep Learning for Sentiment and Event-Driven REIT Price Dynamics

Jonathan Zong
(February, 2020)
Designing Interactive Visualizations by Demonstration

Master of Science in Chemical Engineering

Course X
Department of Chemical Engineering

Aaron Davis Baskerville-Bridges
(See also M.B.A., Course XV)
Computation and Predictive Modeling to Increase Efficiency and Performance in Cell Line and Bioprocess Development

Ketan Kumar
(See also M.B.A., Course XV)
Product Management Framework for the Development of Automation Solutions for Biologics Drug Substance Manufacturing

Randy Stein
(See also M.B.A., Course XV)
Process Intensification of *Spodoptera Frugiperda (Sf)* Cell Growth via Multi-Parallel Bioreactor System

Master of Science in Chemical Engineering Practice

Course X-A
Department of Chemical Engineering

Dana L. Balek
(September, 2019)
Attended School of Chemical Engineering Practice in Lieu of Thesis

Wui Yarn Chan
(September, 2019)
(See also Ph.D., Course X)
Attended School of Chemical Engineering Practice in Lieu of Thesis

Luke Anthony Dengler
(September, 2019)
Attended School of Chemical Engineering Practice in Lieu of Thesis

Xiaorui Dong
Attended School of Chemical Engineering Practice in Lieu of Thesis

Hamid Doost Hosseini
(September, 2019)
Attended School of Chemical Engineering Practice in Lieu of Thesis

Brook A. Eyob
(September, 2019)
Attended School of Chemical Engineering Practice in Lieu of Thesis

Soonhyoung Kwon
(February, 2020)
Attended School of Chemical Engineering Practice in Lieu of Thesis

Hyunhee Lee
(February, 2020)
Attended School of Chemical Engineering Practice in Lieu of Thesis

Matthew Robert Letarte
(September, 2019)
Attended School of Chemical Engineering Practice in Lieu of Thesis

Joseph Haleem Maalouf
(February, 2020)
Attended School of Chemical Engineering Practice in Lieu of Thesis

Maxwell Peter Maritato
(September, 2019)
Attended School of Chemical Engineering Practice in Lieu of Thesis

Lorenzo Milani
(February, 2020)
Attended School of Chemical Engineering Practice in Lieu of Thesis

Clayton Lambert Powell
(September, 2019)
Attended School of Chemical Engineering Practice in Lieu of Thesis

Nicholas Walter Schickel
Attended School of Chemical Engineering Practice in Lieu of Thesis

Yuan Tian
(February, 2020)
Attended School of Chemical Engineering Practice in Lieu of Thesis

Jinming Wang
(February, 2020)
Attended School of Chemical Engineering Practice in Lieu of Thesis

Yen-Ting Wang
(September, 2019)
Attended School of Chemical Engineering Practice in Lieu of Thesis

Master of Science in Aeronautics and Astronautics

Course XVI
Department of Aeronautics and Astronautics

Andrew C. Adams
Nafion Emitter Tips for Electrospray Thruster Applications

Christopher Powell Bradley
(September, 2019)
Navigation of Unknown Enviornments Using High-Level Actions

Alejandro D. Cabrales Hernandez
Real-Time and Minimum-Fuel Trajectory Generation for Docking with Tumbling Objects

Katherine Shisuka Chun
Shape Memory Alloy Actuator for CubeSat Deployable Structures

Christopher Bryce Courtin
(September, 2019)
An Assessment of Electric STOL Aircraft

Ryan de Freitas Bart
Reusability Analysis for Lunar Landers

Lena Marie Downes
Lunar Orbiter Pose Estimation Using Neural Network-based Crater Detection

Faisal Adam Fogle
Liquid Lens Beam Steering and Environmental Testing for the Miniature Optical Steered Antenna for Inter-satellite Communication

Kanika Gakhar
The Effect of Free-Stream Turbulence on Dissipation in Turbulent Boundary Layers

Ximo Gallud Cidoncha
(September, 2019)
A Comprehensive Numerical Procedure for Solving the Taylor-Melcher Leaky Dielectric Model with Charge Evaporation

Juan Jose Garau Luis
A Comparison of Artificial Intelligence Algorithms for Dynamic Power Allocation in Flexible High Throughput Satellites

Peter William Grenfell
(February, 2020)
GNSS-Based Relative Navigation for LEO Nanosatellite Laser Communications

Warren Grunwald
(September, 2019)
Decentralized On-board Planning and Scheduling for Crosslink-enabled Earth-observing Constellations

Dong Ki Kim
(February, 2020)
Learning to Teach and Meta-Learning for Sample-Efficient Multiagent Reinforcement Learning

Luke Kulik
(September, 2019)
Satellite-based Detection of Contrails Using Deep Learning

Madeline Marie Lambert
A Root Cause Analysis of the REXIS Detector Efficiency Loss During Phase E Operations

Beldon Chi Lin
Simultaneous Vehicle and Mission Design using Convex Optimization

Seamus Joseph Holt Lombardo
Evaluating the Effect of Spacesuit Glove Fit on Functional Task Performance

Jonathan V. MacArthur
Material and Fabrication Developments in the Ion-Electrospray Propulsion System

Patrick Calvin McKeen
(September, 2019)
Modeling and Tradespace Exploration of a Space Suit Hip Bearing Assembly using Multi-Degree-of-Freedom Range of Motion Analysis

Nicolas Pierre Meijers
(February, 2020)
Data-Driven Predictive Analytics of Runway Occupancy Time for Improved Capacity at Airports

Daniel Martin Miller
Low-thrust Spacecraft Guidance and Control using Proximal Policy Optimization

Samuel John Miller
Object Tracking in Multistatic Millimeter Wave Radar Networks

Julia Milton
(February, 2020)
(See also S.M., Technology and Policy Program)
Technical and Policy Considerations of Sensor-Based Decision Aids

Christian Donovan Montgomery
Decentralized Resource Allocation for Synchronized Tasks Through Adaptive Large Neighborhood Search (ALNS)

Rachel E. Morgan
(February, 2020)
Optical Modeling and Validation for the Deformable Mirror Demonstration Mission

Dylan Toshinari Muramoto
(See also S.M., Technology and Policy Program)
Tailorability-Focused Recommendations for United States Air Force Software Acquisition Policy

Golda Minh Ý Nguyen
Evaluating the Use of Wearable Inertial Measurement Units for Telemedicine Applications

Uyiosa Mark Oriakhi
(February, 2020)
(See also S.M., Technology and Policy Program)
A Stochastic Life Cycle and Greenhouse Gas Abatement Cost Assessment of Renewable Drop-in Fuels

Aleix París i Bordas
Control and Estimation Strategies for Autonomous MAV Landing on a Moving Platform in Turbulent Wind Conditions

Cadence Brea Payne
Auxiliary Sensor Package for Characterizing Aurora with the AERO and VISTA CubeSats

Tianyi Peng
(February, 2020)
Multiparty Quantum State Discrimination

Rachel E. Price
Assessment of the Expert Locomotive Engineer's Mental Model through Expert-Novice Interactions

Vaishnavi Ramaswamy
Development and Application of Transition Detection Using Infrared Thermography for Characterization of Fan Blade Waviness Effects

Michael Sebastian Schmid
Model-Based Certification of Automated Vehicles

Chockalingam Senthilnathan
(September, 2019)
Shear Shock Evolution in Soft Solids

Noah Wittel Siegel
Silicon Wafer Integration of Ion Electrospray Thrusters

Alexandra Nicole Straub
Expanded Tradespace Analysis and Operational Considerations for Reconfigurable Satellite Constellations

Kieran Leif Strobel
(February, 2020)
Experimental Characterization of Surface Integrated Electroaerodynamic Thrusters

Jeremy P. Stroming
Design and Evaluation of Elements of a Life Support System for Mechanical Counterpressure Spacesuits

Soumya Sudhakar
Balancing Actuation Energy and Computing Energy in Low-Power Motion Planning

Geoffrey Karl - Georg Svensson
Analysis of a 1D Scramjet Model

Jessica Eve Todd
(September, 2019)
Commanding Small Satellites for Simulated Spacecraft Inspections Using Augmented Reality

Carmen-Ioana Ursachi
Output-Based Adaptive Meshing for Higher-Order FEM RANS Solutions on a Multi-Element Airfoil

Amy Ruth Vanderhout
Synthesis and Mechanical Characterization of Aligned Carbon Nanotube Metal- and Carbon-Matrix Nanocomposites

Kevin K. Wang
Airline Revenue Management with Dynamic Offers: Bundling Flights and Ancillary Services

Lingmiao Wang
(See also M.B.A., Course XV)
Optimizing Thermal Spray Quality Verification in FAA Repair Station Specializing in Rotating Components

Zhishen Wang
(September, 2019)
Quantitative Policy Analysis for Aviation Biofuel Production Technologies

Nicholas David Wilde
Optimization and Prototyping of a Surface-Integrated Electroaerodynamic Thruster

Yeyuan Xin
Coronagraphic Data Post-processing Methods using Projections on Instrument Eigenmodes

Zehao Yu
Towards Location-Awareness in Next Generation Wireless Networks: A New Approach Based on Channel State Information

Yiyun Zhang
Pulsed Nanosecond Dielectric Barrier Discharge in Nitrogen at Atmospheric Pressure

Master of Engineering in Biomedical Engineering

Course XX-P
Department of Biological Engineering

Tarun Vinod Kamath
(See also S.B., Course IX)
Tau Aggregation is Heterogeneous Across Cases of Sporadic Alzheimer's Disease and is Influenced by Autophagy Pathways *in vitro*

Samantha M. Leff
(September, 2019)
Development of a Microfluidic Droplet System for Immune Cell Multiplexing Experimentation

Master of Science in Biological Engineering

Course XX
Department of Biological Engineering

Nicole Ann Oliver
(See also M.B.A., Course XV)
Developing a Robust Harvest for High Cell Density CHO Cell Culture

Master of Science in Nuclear Science and Engineering

Course XXII
Department of Nuclear Science and Engineering

Saleem AbdulFattah Ahmed Al Dajani
(February, 2020)
Non-Destructively Detecting Spinodal Decomposition at a Distance: Towards Developing Gigahertz Ultrasonics for In-Vessel Inspection

Dakota Jay Allen
Impact Assessment for the MIT Research Reactor Low Enrichment Uranium Fuel Fabrication Tolerances

Brian Scott Casel
(February, 2020)
Improved Turbulent Lift Momentum Closure for Multiphase Computational Fluid Dynamics

Zhiyuan Cheng
Safety Analysis of a Compact Integral Small Light Water Reactor

Nicholas Anthony Costa
Physical Specifications and Measurements of the MIT Graphite Exponential Pile

Minh A. Dinh
Hydrogen in Transition Metal Doped Transparent Conductive Oxide SnO2

Zhuoran Han
(February, 2020)
Performance Analysis of Functional Expansion Tallies on 2D PWR Pin Cell

Anupam Jena
Wettability of Candidate Accident Tolerant Fuel (ATF) Cladding Materials in LWR conditions

Alexander Jerome Sandberg
(September, 2019)
Shielding Design for the Time-resolving Magnetic Recoil Spectometer (MRSt) on the National Ignition Facility (NIF)

Zachary Skirpan
Multiphase CFD Benchmark of Experimental Critical Heat Flux Data at PWR Operating Conditions

Enrique Velez Lopez
(February, 2020)
(See also M.Eng., Course I-P)
Is Embedding the Reactor Building Below Grade a Cost-Effective Proposition?

Master of Applied Science in Supply Chain Management

Program in Supply Chain Management

Bilal Ahmed

Sherif Alhalafawy

Laura Silvana Allegue Lara

Tala Muneer Alnajdawi

Wassim Aouad

Venkateswararao Bandaru

Ashley Ann Barrington

Sireethorn Benjatanont

Henrique Berbel Pedreira

Angelica Odilia Bojorquez Aispuro

Santiago Botero López

Jamica Baltazar Brillante

Adam R. Buttgenbach

Analiz Cabrera Hernández

Yuchen Yvonne Cao

Justin Patrick Casey

Muhammad Salman Chaudhry

Haiyin Chen

Colleen Grace Copley

Catherine Eileen Dame

Huong Thi Dang

Vijay Krishnan Dasan Potty

Vu Bich Nga Doan

Emilio Dolci

Fedor Egorov

Brett Anthony Elgersma

Kristian From

Sara Viviana Gallo Orjuela

Nikhil Ganapathi

Christian Alfonso Gatmaitan

Gina Markette Gerhart

Abhinav Goyal

Elizabeth Shree Raman Grubbs

An Qi Hao

Yuto Hashimoto

Abdelrahman Ayman Osman Hefny

Christoph Friedrich Herrmann

Xuefang Hu

Libin Huang

Yan Huang

Sae Pil Jung

Sohyun Jung

Andrew Kerr

Gabriela Isabel Lamas Oporto

Yoon-Joo Lee

Israel López Jiménez

Lu Lu

Jesús Gabriel Madrid

Katharina Constanze Mangan

Sundeep Mathur

Tarso Dantas de Melo

Andrew Lee Min

Katherine Gail Nowadly

Anthony Vincent Orr

Anais Ortega Camacho

Ni Pan

Carlos Yohan Rafavy

Henrique Ribeiro Carretti

Mahmood Ahmed Abdelhamid Serry

Liam Charles Sharkey

Hari Kishan Sharma

Sadia Rahman Shathi

Luiz Paulo Silva Barreto

Alessandro Silvestro

David L. Sokoloff

Sindhu Srinath

Jamie Alison Sweeney

Amr Mohammad Taiyeb

Dylan Francisco Tantuico, Jr.

Jamal Taylor

Trevor Nathan Thompson

James Alan Vasa

Ezra Jacob Weisel

Lisha Morlen Yangali Del Pozo

Zhehao Yu

Gaohui Zhang

Mei Qing Zhang

Master of Engineering in Supply Chain Management

Program in Supply Chain Management

Saikat Banerjee
E-commerce Based Closed-Loop Supply Chain for Plastic Recycling

Ngan Ngoc Chau
Intermittent Demand Forecasting for Inventory Control: The Impact of Temporal and Cross-Sectional Aggregation

Matthew James William Dale
Linking Payment Terms and Lead Times

Ye Ma
Human-Machine Teaming for Intelligent Demand Planning

Michael Sean Smith
Closing the Gap Between Information and Physical Flows in a Digital Transformation

Wei Jie William Teo
A Natural Language Processing Approach to Improve Demand Forecasting in Long Supply Chains

Master of Science in Computation for Design and Optimization

Program in Computation for Design and Optimization

Angus Foo
(February, 2020)
Contributions to Automatic Meshing in the AMORE Scheme

Nikhilesh Ghanta
Meta-Modeling & Optimization of Computational Fluid Dynamics (CFD) Analysis in Thermal Comfort for Energy-Efficient HVAC Systems

Wael Hajj Ali
(September, 2019)
Dynamically Orthogonal Equations for Stochastic Underwater Sound Propagation

Evan Keefe Massaro
Modeling CMS Tier-0 Compute and Network Resource Needs

Gin Kaijing Ong
Short-to-Medium Term Dengue Forecast in Singapore

Tony Tohme
The Bayesian Validation Metric: A Framework for Probabilistic Model Calibration and Validation

Pengbo Zhang
(September, 2019)
Learning Model for Forecast Information Sharing

Master of Science in Engineering and Management

Program in System Design and Management

Patricia Arnal Luna
Policies Affecting NetZero Transportation Costs, Consumer Behavior, and Change in GHG Emissions.

Siddharth Bajpai
(February, 2020)
Planning Large-Scale Agile Development Using a Dependency Structure Mapping Model

Nikita Bansal
Enabling the Enablers: Transforming the Lives of Middle-Age Indian Mothers

Ahmed Bilal
(September, 2019)
Using Learning Analytics to Evaluate Design Changes in MOOCs: A Case Study on Assessing Course Pacing

Badrul Bilal
Architecting the Future of a Global Automobile Supplier: A Socio-Technical Perspective

Sofia Blumencweig
From Pastime to Purpose: Design for the Elevation of Creative Hobbies

Dextina A. Booker
(See also S.M., Course II)
The Future of Fashion & Human Gesture Control: Exploration of a Wearable Communication Device for Sign Language Speakers

Helena Briones Panadero
Analysis of the Car Seatbelt Design. A Study of the Invention and Proposal to Minimize the Risk of Injuries During Pregnancy

Michael Christopher Brown
Technology Roadmapping and Design Optimization of an Innovative Mineral-Organic Adhesive for Bone Repair

Luciana Bueno Gomez
Desigining Creative Learning Experiences for Teachers

Chinh Thi Diem Bui
A Study of the Challenges faced by FDA-Regulated Early-Stage Medical Device Startups and How to Approach Them.

Shelley Claire Chan
Comparing Urban Data Governance Policies

Hongling Chen
(See also S.M., Course II)
A Vascular Imaging System for Longitudinal Registration and Mapping of Superficial Vessels with Quantitative Analysis

Zhiyu Chen
(February, 2020)
Energy Transition in Singapore: A System Dynamics Analysis on Policy Choices for a Sustainable Future

Kelly Ann Chiverton
(February, 2020)
Framework for Selecting a System Design Approach

Lisa Crofoot
Management of Cross-Team Interfaces in Large-Scale Agile Development

Qiang Cui
(February, 2020)
Use of Machine Learning in Radio Frequency Integrated Circuits (RFIC) Development

Andrew James Cunningham
Case Study for Populating a Two Sided Platform

Thomas Andrew Deeter
(See also Naval E., Course II)
Creating a Shipboard Power Simulation Tool Using Electrical Load Behavior Modeling

Sofiane Djeffal
Adaptive Defense Against Adversrial Artificial Intelligence at the Edge of the Cloud Using Coevolutionary Algorithms

Oladipupo Doherty
Data Literacy in the Digital Age: Experience Design for a Workplace Learning Solution

Nicholas Henry Dowmon
(February, 2020)
A Generic Framework for Detecting Interpretable Real-Time Anomalies in Network Traffic Data

Vikas Reddy Enti Ranga Reddy
A Systems Analysis and Technology Roadmap for Fall Mitigations Systems for the Elderly

Ameneh Fadaie
Exploration of Consumer Responses to Organic Food Pricing

Adèle Eve Maire Ferrazzini Cadario
Managing Environmental Risks with Flexibility: Case of Phosphate Fertilizer Industry in Morocco

Vedavinayagam Ganesan
(September, 2019)
Digital Transformation and Its Influence on Platform Business

Avinash Gulabrao Ghorpade
Investigating Roadblocks to Artificial Intelligence Adoption in Enterprises through a Systems Perspective

Nava Haghighi
(See also S.M., Course VI)
Self-Interfaces: Utilizing Real-Time Biofeedback in the Wild to Elicit Subconscious Behavior Change

Emily Jane Hsu
(See also S.M., Course II)
Design of a Measurement Device for Bread Dough Proofing

Samip Jain
An Inclusive Design Framework for Autonomous Vehicles to Create Valuable Experience for Elderly

Umesh Jain
(February, 2020)
Digital Health Innovation & Commercialization Framework

Robin Jha
(February, 2020)
Analyzing the Impact of Digital Transformation on Business

Damon Jones
Real Time Demand Forecasting for Dynamically Optimizing Satellite Communications System

Vivek Venkata Kalluru
(September, 2019)
Ultra-Low Noise and Low Temperature Drift Power Supply System Design for RF Applications

Takuya Kashimura
(February, 2020)
Mathematical Analysis of Uncertainty in Machine Learning and Deep Learning

Aaron Kelly
(February, 2020)
Architecting the Future National Security Space Domain Awareness Acquisition Enterprise

Yashashree Kokje
Privacy Preserving Genome-wide Association Studies

Sabira Lakhani
Designing for Human Behavior to Enable Circular Packaging

Jennifer Chung Yan Leung
(February, 2020)
Design Ethics

Donald Kai-Kean Lew, Jr.
Applying an Uncertainty-Based Acquisition Strategy Framework to Select An Appropriate Approach for New Product or System in the Military

Blanca L. Foncillas
The Future of Retail

Dai Lin
Access With(out) Judgment

Michael Kaiping Liu
(See also Naval E., Course II)
Beamforming Performance Enhancement by Adaptive Hyperbola Array Shape Estimation

Christopher Noel Lloyd
Experimental Feedback Interfaces for Consumer Activity Tracking Wearable Devices

Paulo Francisco Lopez De La Toba
(September, 2019)
A New Approach to Prevent Accidents in the Steel Industry

Eugene Daniel McGuinness
(September, 2019)
Systems Architecting the Future of U.S. Coast Guard Operational Logistics: A Framework for Enhancing Mission Support Responsiveness

Lok Yee Melody Mui
(February, 2020)
Human-Centered Fashion: From Scratching to Selling

Tiago Murbach Koga
Technology Elasticity: Demand Impact on the Commercial Success of Regional Aircraft.

Koji Nakashima
The Project of Sharing Economy in Lodging in Tokyo and NY

Patrick Sean O'Reilly
(February, 2020)
Architecting the Enterprise to Manage Innovation

Larisse-Ann Yee Ortiz-Luis
(See also M.B.A., Course XV)
Designing Effective Strategies to Accelerate Consumer Adoption of Alternative Proteins

Evan Hartley Platt
An Exploration of Spinal Care Injury Treatment: Opportunities to Improve Functional Recovery and Independence for Patients with Incomplete Spinal Cord Injuries

Yiyuan Qin
Design for Community Resilience in the Age of Disasters: A Case Study in Puerto Rico

Gokul Prasath Rajamanickam
A Multispectral Imaging Method and Device to Detect and Quantify the Presence of Fluid in the Middle Ear to Facilitate the Diagnosis and Triage of Ear Infections

John Bishop Ravenel
Rhetorical Fractures: Designing for Social Movement Growth Using Ancient and Contemporary Tools

Ajay Siva Rayasam
Predicting At-Risk Students from Disparate Sources of Data

Priyanka Ray Barua
(February, 2020)
Humanistic Co-Design of a Solution for the Rehabilitation of Children suffering from Cortical Visual Impairment.

Jairo Ernesto Rodriguez Tovar
Sustainable and Inclusive Last-Mile Transportation for Developing Countries

Keran Rong
System Design and Optimization of an Aerial Refueling System for Transcontinental Flights

Michael Louis Sapienza
(September, 2019)
Analysis of Energy Delivery Sector Malware Attack Response Mechanisms

Pankhuri Sen
(February, 2020)
(See also S.M., Technology and Policy Program)
A Smart Diaper Wetness Detection Sensor: Concept, Design and Ethical Considerations

Sarabjeet Singh
E-commerce Platforms and Business of Selling Groceries Online

Hannah M. Slominski
Using STPA and CAST to Design for Serviceability and Diagnostics

Yuki Soeda
Analyzing the Future Architecture of High-Speed Railway Maintenance in Japan

Ryuichi Takagi
An Approach to Developing a Resilient High-Speed Rail Enterprise Architecture Through Digital and Human-Centralized Transformation

Yasutsugu Tamura
Investigating the Impact of Technology Progress on the Future Architecture of Japanese Space Enterprise

Brendan Weijian Tan
(February, 2020)
Countering Disinformation: Using Systems Thinking to Develop an Integrated Approach

Javier Treviño Ruiz
A Survey of Human-Centered Design Methodologies for a New Hybrid Approach in Product and Experience Innovation

Daniel Xavier Valderrama
Rider Multihoming in the Rideshare Market

Ramaa Venkatachari
Maternal Mental Health and Child Outcomes: A Human-Centered Design Perspective on Preventive Mental Health Care

Anping Wang
Analyzing on How Short-Video Social Media Influence Decision-Making Process

Juliet Wanjiru Wanyiri
(See also S.M., Course II)
Structural and Aesthetic Design Applications of Flexible, Thin-film Solar Cells to Power Off-Grid Tensile Structures

Daniel Arthur Wollin
(February, 2020)
Motion Analysis of Flexible Ureteroscopic Techniques by Urologic Surgeons

Ming-Hui Wu
Case Study for Next-Generation Augmented Reality Device

Xiaoyu Yan
Newsonomics: Business Model Innovations in News Media Organizations

Kevin Yu
Innovation Processes & Culture on Financial Impact

Tamara Miller Zaichkowsky
(February, 2020)
Digital Transformation of Global Banks

Jiani Zeng
(February, 2020)
Expend Material Presence to Material Experience with Volumetric Thinking – Voxel Based Multi-Material Printing in Designing Objects

Bin Zhou
Volatility Trading System Design with Scaling Risk Management

Master of Science in Health Sciences and Technology

Program in Health Sciences and Technology

Davi Eric da Silva
(February, 2020)
Human Strategies for Manipulation of Physical Objects with Complex Dynamics

Master of Science in Technology and Policy

Institute for Data, Systems, & Society

Wajeeha Ahmad
(September, 2019)
The Anonymity-accountability Trade-off in Communication Networks

Lawrence Mark Baker
(September, 2019)
Blood Glucose Management in the ICU

Charles William Chimento III
(See also S.M., Course VI)
Innovation in the US Air Force

Anna Christine Evans
A Framework for Assessing the Value of Flexibility in Electricity Network Investments

Tomas Wesley Green
Distributed Household Effects of Climate Policy in the United States

Andrés Inzunza Besio
Distributional Effects of Net Metering Policies and Residential Solar Plus Behind-the-meter Storage Adoption

Hazal Mine Kansu
(September, 2019)
Artificial Intelligence Impact on Occupations and Workforce

Xavier Paul Lister Lavenir
(September, 2019)
The Strategic Design and Environmental Footprint of Highly Responsive Urban Distribution Networks

Pedro Manuel Maddens Toscano
Impacts of Airports on the Quality of Life of Surrounding Communities

Julia Milton
(February, 2020)
(See also S.M., Course XVI)
Technical and Policy Considerations of Sensor-Based Decision Aids

Dylan Toshinari Muramoto
(See also S.M., Course XVI)
Tailorability-Focused Recommendations for United States Air Force Software Acquisition Policy

Benny Siu Hon Ng
(See also S.M., Course VI)
A Machine Learning Approach to Evaluating Renewable Energy Technology: An Alternative LACE Study on SolarPhoto-Voltaic (PV).

Uyiosa Mark Oriakhi
(February, 2020)
(See also S.M., Course XVI)
A Stochastic Life Cycle and Greenhouse Gas Abatement Cost Assessment of Renewable Drop-in Fuels

Bora Ozaltun
(See also S.M., Course VI)
Learning from Supply Shocks in the Energy Market: Evidence from Local and Global Effects of the Shale Revolution

Sohum Parag Pawar
Resilient Decarbonization for the United States: Lessons for Electric Systems from a Decade of Extreme Weather

Iván Rudnick García
(September, 2019)
Incorporating Renewables into India's Electric Power System by 2037: Evaluate Emissions and Total Costs of Different Pathways That Meet the Government's Long-term Goals

Pankhuri Sen
(February, 2020)
(See also S.M., Engineering and Management)
A Smart Diaper Wetness Detection Sensor: Concept, Design and Ethical Considerations

Master of Science in Transportation

Matthieu Etienne Antoine Crepy
Course I
Leveraging Public Transit for Robust Last-Mile Distribution

Samarth Gupta
Course I
(February, 2020)
Adversarial Robustness of Deep Learning Models: An Error-Correcting Codes based Approach

Anne Woodbridge Hudson
Course XI
(See also M.C.P., Course XI)
Whereto Next? Analyzing Livability and Accessibility in the Later Stages of Life

Jonathan Hoagland Leape
Course XI
(See also M.C.P., Course XI)
Winning the Housing Lottery in Rio de Janeiro: Curse or Cure?

Jintai Li
Course I
(September, 2019)
(See also M.C.P., Course XI)
Future Transit Service for a Broader User Base: Demand Analysis of Hypothetical Autonomous Vehicle Mobility Services Using a Stated Preference Approach

Baichuan Mo
Course XI
(See also S.M., Course VI)
Network Performance Model for Urban Rail Systems

Alexander Papen
Course I
Competitive Impacts of Continuous Pricing Mechanisms in Airline Revenue Management

Mark Perelmuter
Course XI
Quantifying Passenger Impact of Disruptions on Metro Lines

Akash Bharat Raigangar
Course I
(February, 2020)
Evolution of Low-Cost Airlines in Different Global Regions

Maud Sophie Sindzingre
Course XI
(September, 2019)
Detecting and Quantifying Bus Operation Impedance: the Balance between Reliability and Speed

Abigail Joanne Smith
Course I
Framework for Establishing Asset Visibility and Traceability of Medical Devices

Qing Yi Wang
Course I
Extraboard Scheduling in the Transit Industry

Naval Engineer

Course II
Department of Mechanical Engineering

Jason Barnell Barker
(See also S.M., Course II)
Automated Decision Making for Operations within a Traffic Separation Scheme Using MOOS-IvP

David Paul Baxter
(See also S.M., Course II)
Toward Robust Active Semantic SLAM via Max-Mixtures

Thomas Andrew Deeter
(See also S.M., Engineering and Management)
Creating a Shipboard Power Simulation Tool Using Electrical Load Behavior Modeling

Charles Hayden Hasenbank
(See also S.M., Course II)
The Design, Feasibility and Cost Analysis of Sea Barrier Systems in Norfolk, Virginia and the Comparative Cost of Shoreline Barriers

Austin Robert Jolley
(See also S.M., Course II)
Design, Construction, and Analysis of a Modular Ship Model and Open-Source Autonomous Surface Vehicle

Michael Kaiping Liu
(See also S.M., Engineering and Management)
Beamforming Performance Enhancement by Adaptive Hyperbola Array Shape Estimation

Tikhon James Ruggles
(See also S.M., Course II)
Electronics First: Development of a Basic Electronics Course of Study for Naval Engineers

Brian Asanuma Stanfield
(See also S.M., Course II)
Incorporating Contact Management and Marine Dynamics in Decentralized Auction Bidding for Autonomous Surface Vehicles

SLOAN SCHOOL OF MANAGEMENT

Master of Business Administration

Course XV-A (Sloan Fellows)
Sloan School of Management

Mohamad Ali Iqbal bin Abdul Khalid

Melissa Kay Graham Adamski

Olamide Christopher Adeosun

Burouj Ajlouni

Katie Marie Albanos

John P. Albrechtsen

Khalid Khalel Al Jehairan

Hassan Mohamed Al Khalifa

Hongkeun An

Deepak Arora

Yoji Asami

Adam I K Au

Anthony Edward Ausiello

John T. Bailey

Chafik Barbar

Lokesh Bathija

Ogochukwu Gloria Belo-Osagie

Talia Batsheva Ben Sasson-Gordis

Andrew Yang Bilski

José Samuel Bolaños Arceo

Nicholas James Bolt

Aditi Chadha

Shing Yin Chan

Tan Chui-Mae

Brendan James Corcoran

Ajith Damodaran

Leonardo Andres Escudero Torres

James Henry Flatley V

Yi Chiao Fu

Tomoki Fujisaki

Nikolay Georgiev Georgiev

Abhishek Gupta

Ryusuke Haga

Gyohei Hanada

Tao Huang

Yi-Chieh Huang

Miguel Angel Huidor

Sherif Mohamed Hussein Yehia Abdelgayed

Yu Ichikawa

Hiroyuki Ishii

Takanori Kakishita

Pefita Agustin Kam

Moko Laurence Kamdem

Benjamin Ross Keffer

Vadim Keffler

Akhil Khanna

Jae-Sung Kim

Ji Hong Kim

Jongwoong Kim

Jun Hwa Kim

Rahul Kohli

Ashish Kumar

Reo Kusaka

Antonio Augusto L'Amour Federico

Christopher S. Laughlin

Angela Dawn Lawson
Deploying the Right Technology: A Framework for Digital Strategy and Selection at the United States Postal Service to Shape the Future of Work

Michael William Maizels

Alfredo Martínez Guzmán

Atsushi Matsui

Daniel Mendelzon

Anatole Sebastian Menon-Johansson

Kyriakos Metaxas

Maike Minzoni

Manoj Kumar Mishra

Renata Moreira Hourneaux de Moura

Kyoko Murayama

Toshio Nakao

Kihwan Nam

Boris Nicolas

Mieko Ono

Jorge Opaso

Joaquin Orellana

Kai Onn Ow

Sorakrit Phruthanontachai

Athul Prasad

Michael Vincent Prato

Xu Qingyang

Erin Elizabeth Rist

Vigen A. Sargsyan

Doron Baruch Segal

Nelson Henrique Soares Sampaio

Kwangdeuk Sohn

Ian Jonas Spector

Taro Suemitsu

Masato Sugizaki

Juan Luis Surgeon

Ye Tian

Karen Marie Tilli

Patrick John Tomlinson

Tasuku Toyama

Jacob Dean Trapp

Hiroki Tsuchimoto

Galina Umarova

Jose Luis Valdovinos Larragain

Thierry Xavier van Eyll

Zubin Rustom Wadia

Hiromi Watanabe

Jeffrey Bowman Wigh

Sung Pill Won

Sok Mei Wong

Juliana Noriko Yamada

Haihua Zhang

Xu Zhang

Ying Zhou

Master of Business Administration

Course XV-E (Executive)
Sloan School of Management

Muthla Bader Alsayer

Taimur Aslam

Dev P. Balasubramanian

Mark Stephen Banner

Stephen Gregory Barr

Nate William Bechtel

Daniel Becker Feldman

Navneet Behl

Laisvyda Bielkus

Ian E. Brynjolfson

Guillermo Andres Casas Giraldo

Timothy Tianyi Chen

Antony Chu

Barbara Clay

Thomas John Colatosti, Jr.

Michael Dale Connolly

Michelle M. Davidson

Joseph Marc Abay de Veyra

Pradeep Dinakar

Amanda Jean Doremus

Sarita Rani Dua

Catherine Dukeman - Makstenieks

Rosana El Sayed

April Effort Eugene

Abdul Amir Kahtan Fadel

Paul F. Fagan

Robert Michael Flaig

Nana Kwabena Frimpong

Yuriy Victor Gankin

Luis Enrique García de Brigard

Steven Ray Garske

Erika Lea Gianni

Andrey Gladkov

Michael Sean Glazier

Kushal Gohil

Ingrid Goldberg

Seyed Koosha Golmohammadi

Geethanjali Gopal

Aaron L. Greenwald

Kelly Lynn Gross

Gita Pradeep Gupte

Katherine Christie Hall

Benjamin Gardiner Hardy

Johnathan L. Harvey

Tomás Herranz Medina

Robert Grant Hill

Matthew Murray Hutter

Sarah Marie Hyder

Felipe Jaramillo Jaramillo, Sr.

Amardeep Kaur Jenkins

Mohiuddin M. Khan

Ivana Kyung Kim

Krikor Magardich Kirkorov

Lisa Eyami Kirsic

Matthew Paul Knott

William Lund Kwon

Chemuttaai Koech Lang'at

Megan Kathleen Lanham

Philippe Larochelle

Jason Thomas Lavender

Jürgen José Lebacs

Kenny K. Lee

Alida Marie Lujan

Denis Lussault

Gene Mak

Rao Venkatramana Mantri

Kentaro Matsumoto

Brendan Joseph McCarthy

Daniel Scott McClelland

Steven G. McCulloch

Sergio Medina

Kaushal B. Mehta

Alexandre Meira da Rosa

Amir Michel Barsoum Mikhail

Satoshi Mitsuishi

Ambrish Mody

Mitra Mosharraf

Nay Naing

Barada Kanta Nayak

Judith W. O'Connell

Jinyong Oh

Daniel Aaron O'Hara

Timothy D. O'Neill

Michael Anthony O'Sullivan

Manju Max Palakkat

Vanteya Amit Vikram Pandit

Adeyemi Oluwaseun Paul-Taiwo

Albert Pérez Baucells

Friedemann Rolf Pfeiffer

Prashanth Prasanna

Rajesh Rajan

Ananthi Rathinam

Kristin S. Riley

Susan Rivas

Americo Rodriguez, Jr.

Kevin Michael Roepke

Sebie Abdulrahman Salim

Anh Vu Sawyer

Cecilia Scanlon

Matthew John Schleiffarth

J. Philipp Schmidt

Prem Sadanand Shekar

Andrew J. Shin

Prakash V. Shukla

Andrew Kyle Simpson

Catharine Chloe Smith

Michael Alan Solomon

Ravi Srivastava

Colleen Marie Stadelmann

Mariah C. Stein

Susan Bose Stempek

Jason R. Strebe

Andrew John Surwilo

Dmitri Tcherevik

Ponnarathneary Ting

Eleni Anastasia Tousimis

Sarah Little Jane Trice

Anuj Tyagi

Vassilios Valayannopoulos

Erez Vigodman

Ruth Ann Vleugels

Ying Wang

Zheng Wang

Matthew Williams

Manuela Leah Faye Silverstein Zoninsein

Master of Business Administration

Course XV

Sloan School of Management

Robert James Addy
(See also S.M., Course II)
Cost of Complexity: Mitigating Transition Complexity in Mixed-Model Assembly Lines

Rahul Agarwal

Lillan Marie Agerup

Adam Agustin Aguilera

Nafees Ahmed
(February, 2020)

Olutosin Akinyode

Anisha Alahari

Arwa Albaadi

Faisal AlBreiki

Avery Sloan Alchek

Paula Alemany Ripoll

Rebecca Rae Allen

Muneef Majed AlMuneef

Adam Alon

Ali Said Alrayes
(See also S.M., Course VI)
Transmission System Overvoltage Mitigation Through the Use of Distributed Generation (DG) Advanced Inverters

Ethan Lalakea Alter

Ankur Mukesh Amlani
(See also S.M., Course II)
Floor Entry Task Prioritization for Highly Automated Fulfillment Centers

Felipe Ángel Macía

Ruhani Arya

Takehiro Asakura

Janice Bae

Elizabeth Noyes Bagley

Leo Anthony Bonfanti Balsom

William Alan Barber, Jr.

Olivia Anne Baribeau

Aaron Davis Baskerville-Bridges
(See also S.M., Course X)
Computation and Predictive Modeling to Increase Efficiency and Performance in Cell Line and Bioprocess Development

Brooke Emily Baumgartner

Michael Joseph Reyes Bautista

Ajay Bawa

Audrey Bazerghi
(See also S.M., Course I)
Inventory Modeling for Active Pharmaceutical Ingredient Supply Chains

John Thomas Behrens

Alexandra Rachel Beizer

Thomas Joseph Belton

Hadar Grader Ben Ari

Maria Leonor Bensusan da Gama Lobo Xavier

Andrea Bettale

Larissa Cavalcanti Bezerra Abreu

Anshul Bhide

Cristina Margaret Bleicher

Rachel Alice Blum

Benjamin David Boutboul

Yann Michel Yves Marie Boyeldieu

Casey Alex Boyle
(See also S.M., Course II)
Process Enablers for Successful Reverse Engineering inside Large Organizations

Allison Rose Brouckman

Carolyn Irene Brown

William Brower Brundage

Jeffrey Michael Bryan

Julia Elizabeth Burkett

Caitlin Mary Butala
(See also S.M., Course II)
Connected Factory: Real Time Data Analysis for Manufacturing Efficiency

Christine Michiko Santiago Cabigao

Matthew S. Cabrera

Carla Cafici

Colin Ian Cain

Lindsay Lorraine Calderón

Anais Gabriela Callejon

Ignacio Campos Sainz

José Renato Paiva Carvalho

Benjamin John Isaac Celermajer

Mimi Qu Chan

Evan Philip Chapman

Lindsey Tumperi Chapman

Siddhanta Chaudhary

Anjuli Cheema

Andrew Chen

Xiaoying Sheryl Chen

Yiwei Chen

Kevin Alexander Cheung

Wei-Ling Chiang

Brendon W. Chiu
(See also S.M., Course II)
Additive Manufacturing Applications and Implementation in Aerospace

Tzer-yen Chow

Jeffrey Bowen Chu
(See also S.M., Course II)
Investigating the Feasibility and Impact of Integrating Wire-Arc Additive Manufacturing in Aerospace Tooling Applications

Jonathan David Chu

Brittany Elizabeth Churchill

Santiago Clara

Cameron Cler

Donald Mateo Coates
(See also S.M., Course II)
Integrating Agile within Complex Hardware Development via Additive Manufacturing

Guillermo Colell Brandan

Ellen Coleman
(See also S.M., Course II)
Establishment of a Novel *Pichia Pastoris* Host Production Platform

Caroline Regina Constable
(February, 2020)

Alessandro Conti

Emiliano Conti

Anna Helen Coonrod

Melanie Grace Cornell

Bryan Cortes

Hugues Coruzzi

Antonio da Cunha Gonçalves Prado

Vivian Dai

Lea A. Daigle
(See also S.M., Course II)
Organizational Architecture Design and Assessment of Statistical Feasibility for FSDA Implementation in an Airplane Subassembly

Or Dan
(See also S.M., Operations Research)
Improving Prior Knowledge Assessment in Process Characterization

Kyle Ricardo Danner
(See also S.M., Course II)
Utilizing Automated Inspection to Identify Surface Quality Defects within the Automotive Body Assembly Process

Durgesh Das
(See also S.M., Course VI)
Assessing Sales Floor Capacity and Replenishment Strategy

Shouvik Das
(See also S.M., Course I)
Multi-Echelon Supply Chain Design for Amazon Private Brands

Kristell Mariette Anne Dauphin

Monique Claire Davey

Cara Maureen Davis

Matthew Souma Deane

Martin de la Herran Oyarzun

Pablo Del Pozo Arance

Harsh Ameet Desai

Romain de Saint Périer

Fatima Zahraye Diallo
(See also S.M., Course II)
Using Discrete-Event Simulation to Increase System Capacity: A Case Study of an Assembly Plant

Borja Domínguez Mouriz

Genevieve Claire Dukes

Tyson Samuel Eberhardt

Filippos Economou

Eric Scott Eliasson

Itzhak Elyahou

Mandy Leigh Epstein

Álvaro Javier Escolán Aguilar

Winston C. Esposito

Miquel Ferrer Gomez

Armando Ignacio Flores Mendoza

Ka Wing Fung

Heather Rose Furman

Khira Divol Gabliani

Vaishali Gadhok

Nicolai Valentino Gamrasni

Jaime García González

Mariana Garcia-Valdecasas Dorrego

Brian Gabriel Gaudio
(See also S.M., Course II)
Assessing the Impact of Historical Operational Data from Complex Assets on Predictive Maintenance Models

Ernesto Gaxha

Efewongbe Keyirokome Gboneme
(February, 2020)

Jeffrey Georgatos, Jeff Georgatos

Noa Ghersin
(See also S.M., Course II)
Improving Asset Utilization and Manufacturing Production Capacity Using Analytics

Dipayan Piku Ghosh

Garoon Jordan Gibbs-Racho

Alejandro León Gimeno Sanz

Matteo Gobbi

Nigel Min Feng Goh
(See also S.M., Course II)
Applications of Risk Pooling for the Optimization of Spare Parts with Stochastic Demand Within Large Scale Networks

Amir Goldberg-Kidon

Molly Gibbons Golinvaux

Carolina Alejandra Goncebat

Anchal Goyal

Mauro José Granese Rosselli

Glen Michael Gregory

Gerardo Guadiana
A Netflix Experience: Reimagining the Direct-to-Consumer Platform

Emily Yi-Chieh Guo

Nadim Amine Hachem

Rebecca S. Hammer

Guannan Han

Monica Francesca Harnoto
(See also S.M., Course I)
Value of Distribution-Level Reactive Power for Combined Heat and Power Systems

Seth Tohn Harper

Meaghan Deborah Hartman

Denton Xiang He
(See also S.M., Course II)
Distribution and Replenishment Optimization between Locations of High and Low Real Estate Cost

Clare Deborah Herceg

Igor Brenner Hernandez Neves

Chanelle Nicole Herring

Itay Himelfarb

Christina Cheing Ho

Wan Ching Ho

Christiana Michelle Hollis

Dmytro Holovchuk

Nicholas Hong

Emily Hsiao

Justin Cheng-Yang Hu

Yosuke Inoue

Harshita Sriram Iyer

Camille Jackman

Shuang Ji

Zeyuan Jiang

Jared Ray Johnson

Kyle Thomas Johnson

Samuel Garvey Johnson

Felipe Jorquera

Sahil Vivek Joshi

Bhuvit Jotikasthira

Nicholas Makari Judson

Nalaka Kanishka Bandara Kahawatte
(See also S.M., Course I)
Digital Business Model Development and Validation for Real-Time Monitoring Solution for Electrical Power Transformers

Harry Kleinberg Kainen

James Benjamin Kalin

Ravitej Reddy Kanapuram
(September, 2019)
(See also S.M., Course II)
Using Data Science and Model Based Systems Engineering to Design and Operate Production Systems

Evgenia Karelina

Nishith Kaushik

David Fredrick Pongrass Kaye

Liliana Rose Kennedy-Paesler

Adil Ahmad Khan

Celi Lindiwe Khanyile-Lynch

Mary Njoki Kiarie

Laura Sue Kier

Ellena Kim

Katherine J. Kim

Peter Hyunjoong Kim

Yong Min Kim

Akshay Shailendra Kirtikar

Lisa Kondo

Emma Rose Kornetsky

Katharine Shaer Krieger

Andrew Kuforiji

Amit Kumar

Ketan Kumar
(See also S.M., Course X)
Product Management Framework for the Development of Automation Solutions for Biologics Drug Substance Manufacturing

Tansaya Kunaratskul
(February, 2020)

Young Soo Kwon

Víctor Lafuente Aceituno

Hersh Lakdawala

Matteo La Naia

Jordan Riley Landis
(See also S.M., Course II)
Benchmarking Environmental Efficiency of Garment Factories to Understand the Value of Real-Time Environmental Data

Guillermo Larrucea Vinós

Victor Laurindo Horta Ferreira

Jaclyn Grace Leccese

Eric Tzy Jung Lee

Robert Lee

Thomas Bourne Lefevre

Ada Xiaoyuan Li

Dickson Li

Mu Li

Robert Yingzhe Li

Hai Viet Quoc Nam Nhu Lieu

Alec Glenn Lignitz

Maria Luisa Jimenez Lim

Ying-Jeng Lin

Robert Lindeen de la Fuente

Steve Tuekam Lionel

Mengjie Liu

Tuo Liu

Zihuai Liu
(See also S.M., Course I)
Artificial Intelligence Infrastructure into Material Attributes Insights

Antonio Llorens

Sahejvir Locham

Alan Everett Long
(See also Ph.D., Course X)

Jay Michael Lopez-Braus

Hugo A. López Velarde Martínez

Alex Jeffrey Lough

Jane L. Lu

Jordan Logan Luft

Ingo Lupatelli

Stephanie MacConnell

Henrique Magalhães Soares

Ian L. Mahmud

Nakorn Manoonpong

Jens Marchewski

Laurel J. Marcus

Francisco S. Marino

Randall Chase Markham
(See also S.M., Course I)
Reducing Inventory through Supply Chain Coordination in an Industrial Supply Chain

Randall Markush-Hallman

Clara Sophie Marquardt

Victoria Barbara Martin

Maria Martinez Calazans Rodrigues

Alfonso Manuel Martinez Sanchez

David Anthony Mazza

Colin Alex McIntyre
(See also S.M., Operations Research)
Optimizing Inbound Freight Mode Decisions

Connor Hamilton McLane

Matthew McLean

Emily Lauren Pogar Meade

Dhwani Mehta

Paul Meierling

Dana Mekler

Alessandro Melini

Thomas Collins Meyer

Brett Daniel Mills

Enric Guillermo Miralles Carretero

Lara Mitra

Kshitij Mittal

Alyssa Moledina

Filipe da Conceição Pereira Monteiro

Dante Edward Montgomery
(See also S.M., Course II)
Project-Based Manufacturing: An Approach for Quote Development

Carl Moos

Michel Mosse

Akhan Mukhanov

Ananya Mukkavilli

Lorcan A. Murphy
(See also S.M., Course I)
Increasing E-commerce Distribution Center Capacity Through Slotting Strategy

Marjani Nicole Nairne

Erica Margaret Nangeroni

Mercy Kavivi Ndambuki

Anthony Mark Ndikum

Danielle Nedivi

Margaret Ellen Neff
(See also S.M., Course I)
Evaluating Modeling Techniques for Quantifying Production Risk in Contact Lens Manufacturing

Jeremy Binder Ney

Jamie Niu

Hans Antoon Nowak II
(See also S.M., Course II)
Strategic Capacity Planning using Data Science, Optimization, and Machine Learning

Camila Nunes Metello

Mohamad Jad Ojjeh

Rea Candra Oktaviara

Nicole Ann Oliver
(See also S.M., Course XX)
Developing a Robust Harvest for High Cell Density CHO Cell Culture

Chloe Artemis Orphanides

Larisse-Ann Yee Ortiz-Luis
(See also S.M., Engineering and Management)
Designing Effective Strategies to Accelerate Consumer Adoption of Alternative Proteins

Babette Josephine Christine Paping

Komal Ravindra Patel

Kristofer Bryce Peck

Walter Charles Peppelman III

Andrew B. Perlman

Hannah Michelle Phillips
(See also S.M., Course I)
A Data-Driven Approach to Continuous Improvement in Reverse Logistics

Jarrod Todd Pierce

Victoria Anne Pisini

Bidusha Poudyal
(See also S.M., Course VI)
Predictive Analysis of Installation and Operational Qualification Issues vs. Process Severity Events

Evan William Alroy Powell

Kushal Purie

Talía Quijano Mulanovich

Divya Raghavan

Matan Ravid

Joshua Reed-Diawuoh

Oliver Brian Regele
(See also S.M., Course VI)
Applied Discrete Event Simulation for Root Cause Analysis and Evaluation of Corrective Process Change Efficacy within Vaccine Manufacturing

Jason Matthew Rehhaut

Kelly Joan Ren

Javier Dante Renna

Kevin Grady Reynolds

Arturo Alfonso Ricke Zegers

Ashley Victoria Rinere

Madeline Kirby Ripley

Francisca Andrea Riquelme Fenner

Eric Thomas Roberts

Taylor Kirstyn Robinson
(See also S.M., Course II)
Leveraging Flexible Manufacturing in Streamlining New Product Launch Processes

Gabriela Romero Garibay

Daniel Morse Rosengard

Ehud Rosenhand

Michael Columbus Ross
(See also S.M., Course II)
Reducing Variations in a Highly Constrained Environment in Order to Increase Production Capacity

Robert Rovai

João Pedro Wald Saad

Matias Sahli

Kittichai Salingkaleekul

Erica Sharyn Salmirs

Alessia Olimpia Samaranch Bigelli

Amrita Sankar

Isaac Melquisedec Santos

Rukmini Sarkar

David P. Sawyers

Jennifer Moffitt Schall
(See also Ph.D., Course X)

Steffen Werner Schmidt

Cyrus David Schroeder

Sarah Aliza Scolnic

Andrew Jonathan Scott

Fernanda Ana Maria Seoane Magnasco

Nathan Daniel Serota

Ishan Shah

Jaina Shah

Devon Bresler Shapiro

Sumit Kumar Sharma

Takuya Shimojo

Yasuhiro Shimozono

Katherine Marie Shirrell

Vladislav Shraybman

Zeeshan Riaz Siddiqi

Augusto Siguero Güemes

Sharad Singhani

Tassuda Sirilerkpipat

Jegadeesh Sithamparathas

Ilan D. Slovin

Julianne Patricia Smith

Divya Sohal

Kelsey Price Sommers

Katherine Jean Soule

Randy Stein
(See also S.M., Course X)
Process Intensification of *Spodoptera Frugiperda (Sf)* Cell Growth via Multi-Parallel Bioreactor System

Brett Aaron Sternfield

Emma Rose Stevens-Smith

Amanda Jo Stibel

Brendan Ferris Stiffle

Aaron D. Stinnett

Anjelaka Renee Stolte

Gregory S. Stoner

Christopher Gepe Strayer

Asia Meleyana Stuerznickel

Van-Anh Su

Muhammad Farzan Zaheer Subhani

Sean Michael Sutherland

Sadaf Hajira Syed

Rodrick Simon Kua Tan

Jeffrey Louis Tedmori

Yih Lin Teh

Jonathan Jian Wen Tham

Christie Ting

Christopher David Tinsley

Paul Toribio

Luis Eduardo Torres Robles

Georgia Boyd Travers

Timothy Tsang

Kazuki Tsuchiya

Adriane Ann Turner
(See also S.M., Course II)
Evaluation of Automated Storage and Retrieval in a Distribution Center

Osaze C. Udeagbala

Anant Padmanabha Udpa

Lea Freeman Vavoules

Alfredo Enrique Vetencourt

Joaquin Visquert Pitarch

Daniela Maria Viteri

Stephen Kaapuni Wagner

Lingmiao Wang
(See also S.M., Course XVI)
Optimizing Thermal Spray Quality Verification in FAA Repair Station Specializing in Rotating Components

Katie Elizabeth Wartman

Samuel Ross Waterbury

Merit Rachel Webster

Elizabeth Weingartner
(February, 2020)

Annie Ryan Ungrady Weißbach

India Claire Wells

Dillon Ford Wiesner

Thomas Lee Wilder III

Christopher Stephen Willis

William Geoffrey Winegar
(See also S.M., Course I)
Standardization of New Product Introductions to Achieve Zero Defect Lines

Korin Winstok

Zoë Jewell Wolszon
(See also S.M., Course VI)
Improving Predictability of Cell Culture Processes During Biologics Manufacturing Scale-Up through Hybrid Modeling

David Travis Kent Woodruff
(See also S.M., Course II)
Stepping Toward a Smarter Factory at Canam

Yiche Wu

Dawn Xiang

Sile Xiong

Roger Wang Xu

Yan Hau Xu Wu

Sagar Pandey Yadama
(See also S.M., Course II)
Data Driven Risk Assessment for Turbine Engine Programs

Natsuko Yamazaki

Yao Wen Yeo

Paige Denise Youngerman
(See also S.M., Course II)
Impact of Part Proliferation on a High Mix Low Volume Manufacturing Environment

Yinan Yue

David Parsons Zackheim

Juliana Zapata Ramírez

Xinhong Zeng

Keita Zenki

Yuezhi Zhan

Nick Zhao

Valerie Zhao Zhao

Jaime Zorrilla Sánchez de Neyra

Master of Business Analytics

Course XV-N
Sloan School of Management

Jonah Aaron Adler
(September, 2019)

Anthony Joseph Battista, Jr.
(September, 2019)

Jocelyn Mikael Raphael Beauchesne
(September, 2019)

Francois Pierre M Caprasse
(September, 2019)

Shijian Chen
(September, 2019)

Chia-Wei Chiang
(September, 2019)

Antonin Dauvin
(September, 2019)

Sun Fong
(September, 2019)

Mason B. Grimshaw
(September, 2019)

Srishti Gupta
(September, 2019)

Noah Lucas Hagen
(September, 2019)

Pengcheng Han
(September, 2019)

Nader Jamal Hoballah
(September, 2019)

Rachel Elisabeth Holmer
(September, 2019)

Chuyan Huang
(September, 2019)

Zhechao Huang
(September, 2019)

Rémi Lalanne
(September, 2019)

Sheamus Francis Larkin
(September, 2019)

Si Min Elizabeth Lim
(September, 2019)

Wenwei Liu
(September, 2019)

An Vinh Luong
(September, 2019)

Kim-Anh-Nhi Nguyen
(September, 2019)

John Lim Oh
(September, 2019)

Jun Jie Ong
(September, 2019)

Elisa Piscitelli
(September, 2019)

Amal Rar
(September, 2019)

Michael Gregory Rieker
(September, 2019)

Antoine Roncoroni
(September, 2019)

Alexandre Claude Marc Saillard
(September, 2019)

Leonor Anna Saitkoulov
(September, 2019)

Alessandro Mario Scaglia
(September, 2019)

Annelise Andrea Steele
(September, 2019)

Michael Alan Stern
(September, 2019)

John Maxwell Stockdale
(September, 2019)

Kevin Francis Talty
(September, 2019)

Leann Pearl Geetha Thayaparan
(September, 2019)

Jérémy Tran Kiem
(September, 2019)

Julia Erna van Hoogstraten
(September, 2019)

Lisa Frida Walz
(September, 2019)

Jixin Wang
(September, 2019)

Zhelun Wang
(September, 2019)

Tiantian Ye
(September, 2019)

Chua Yi Zhe Gabriel
(September, 2019)

Meng Yuan Zhang
(September, 2019)

Master of Finance

Course XV-F

Sloan School of Management

Laira Aggarwal

Dima Akraa

Nadia Amalia

Sanat Anand

Talal Saad Azhari
(February, 2020)

Racem Benhamed

Yannik Birkhahn
(February, 2020)

Øyvind Lofthus Bjørndal
(February, 2020)

Adrien Pierre Guillaume Marie Bougon

Peter Terence Bowers
(February, 2020)

Ricardo Bravo Gomez

Théo Carbonnier

Hugo Castalan
(February, 2020)

Prashant Chakradhar

Bangqing Chen

Jiada Chen

Jianyu Chen
(February, 2020)

Shiting Chen
(February, 2020)

Sijin Chen

Oriane Cochard

Gabriel Sacha Cohen

Ruolan Deng
(February, 2020)

Angad Singh Dhamija
(February, 2020)

Nicolas Jean Charles Dixneuf

Redolphe Doyon

Jingqiao Feng
(February, 2020)

Joseph Benjamin Freund

Aditya H. Gandhi

Bowei Gao

Mila Gao

Shounak Ghosh
(February, 2020)

Yonatan Goldfarb

Xiaowei Gu

Qing Guo
(February, 2020)

Kushaagra Shri Gupta

Parikshit Gupta
(February, 2020)

Pierre-Alexandre Guyomar

Maya Souheil Haddad

Erik Marc Christophe Hadife

Viktor Hermann
(February, 2020)

Jiayan Hou

Hongtao Hua
(February, 2020)

Rakan Galal Husni Bey

Leon Jeantaud

Eskild Jørgensen

Zhang Kao
(February, 2020)

Suren Karapetyan
(February, 2020)

Emma Marie Kerwin

Pavel Lebedev
(February, 2020)

Hanzhao Li
(February, 2020)

Yinuo Li

Youwei Li
(February, 2020)

Claire Lin

Chenchen Liu
(February, 2020)

Fangyuan Liu
(February, 2020)

Yi Liu

Angélica María Lizarazo Cuéllar

Laura Lonardi
(February, 2020)

Xiaoyi Benjamin Lu
(February, 2020)

Yezi Ma
(February, 2020)

Harveer Singh Mahajan

Haosheng Mao

Theodore Elias Maris

Adam Sandor Nagy

Akshay Nandwana

Nicholas Chunfei Ng

Jingwei Ni
(February, 2020)

Tracey Dawn Nilsen-Ames

Jeremy Obadia

Felix Nikolaus Oblin

Harry Hung Pan
(February, 2020)

Shiqi Peng
(February, 2020)

Qiuyu Qian

Jiufang Qin
(February, 2020)

Ke Qu

Yang Qu
(February, 2020)

Yaoyue Qu
(February, 2020)

Shuyu Rao

Marco Antonio Salazar Inga

Shayna Star Servillas

Shaheryar Ahmed Shaikh

Yuxiao Shang
(February, 2020)

Ruoping (Cathy) Shi

Shubhi Singh
(February, 2020)

Huili Song
(February, 2020)

David Wenxiang Su

Qijing Tan

Mu Tang
(February, 2020)

Pınar Topal
(February, 2020)

Carlo Daniele Urbano

Nihar Pratin Vete
(February, 2020)

Zewei Wan

Yuan Wang
(February, 2020)

Qiyue Wu

Shuning Wu

Marcus Valerian Würtenberg

Xingrui Xiang
(February, 2020)

Yizhen Xie
(February, 2020)

Xueying Xiong

Jiaming Xu
(February, 2020)

Xiaoqing Yang

Yi Yang
(February, 2020)

Hang You

Lu Zhang
(February, 2020)

Tong Zhang

Jingjie Zheng
(February, 2020)

Tianyi Zheng
(February, 2020)

Yongwei Zheng
(February, 2020)

Yiran Zhou

Yutong Zhou

Zhiyu Zhou
(February, 2020)

Kelly J. Zhu

Master of Science in Management Studies

Course XV-S
Sloan School of Management

Lucia Yiyi Chai
A Direction and Business Plan for Developing and Commercializing Adult Incontinence Products in China

Jingjing Jun
Competitive Analysis Of Digital Content And Knowledge Sharing Market For Adult Education In China

Chee Swee Kek
The Hidden Costs of Rapid Economic Growth

Yunxuan Lu
Study on China Non-Performing Loan

Boxin Mou
Study on Social Media Marketing Campaign Strategy – TikTok and Instagram

Ponce Ernest Pineda Samaniego
Analytics for Strategic Corporate Social Responsibility

Yuan Tian
Case Studies on Companies that Delisted from US and Relisted in China

Tian Zeng
The Competence Model of Producers as Managers and Entrepreneurs of Cross-Cultural Movie Crews

Zhe Zhang
A Statistical Analysis of the Potential Impact of Boeing 737 MAX Crashes on Passenger Behavior

Shirley Xueer Zhou
A Study of the Canadian Property Boom

Jiale Zhu
The E-Sports Industry in China -- Business Plan for Cuitimate

Master of Science in Management Research

Course XV
Sloan School of Management

Natalie Berfeld
Do You Have to Adopt to Adopt? Evidence on IFRS Spillovers in Conglomerates

Matthew P. Cashman
(February, 2020)
Self-Signaling, Magical Thinking, and Spooky Causality in Economic Games

Allison Cole
Cyclical Dynamics in Idiosyncratic Consumption Risk

Zaki Dernaoui
Rising Technologies, Investment and Discount Rates

Leonardo A. Elias
(September, 2019)
Global Factors and the Pricing of Sovereign Risk

Daniel Harris Elkind
(September, 2019)
A Reinforcement Learning Algorithm for Dynamic Trading Execution in the Presence of Signals

Carolyn Jiaming Fu
(February, 2020)
Converging for Effective Exploration: How to Learn Across Unique Successes

Ari Brendan Galper
Accommodation-through-Bypassing: Overcoming Professionals' Resistance to the Implementation of Algorithmic Technology

James P. Houghton
(September, 2019)
Why Meaning Matters for Belief Diffusion in Social Networks

Pierre Jacques Jaffard
Lobbying as a Hedge on Political Risk: When Size Matters

Mahreen Khan
(February, 2020)
Are Worker Management Committees Improving Factory Conditions? A Study of Participation Committees in ILO's Better Work Factories

Olivia S. Kim
The Economic Impact of Education Spending: Evidence from Self-Employed Households

Madhav Kumar
Discount Bundling via Dense Product Embeddings

Tianyi Li
Self-falsifiable Hierarchical Detection of Overlapping Communities On Social Networks

Tse Yang Lim
The Road to Development is Paved with Good Intentions: Inter-Organizational Dysfunction in the UN Development System

Maarten Meeuwis
(February, 2020)
Portfolio Choice and Asset Pricing with Non-Homothetic Preferences

James Corbett Mellody
Invisible Value: How Peripheral Functions Display Their Worth Using Narrative Action

Yury Olshanskiy
Oligopolistic Market-Making and Inventory Heterogeneity

Ethan J. Poskanzer
The Depth of the River: Student Matriculation Decisions and the Black-White College Completion Gap

Lindsey Rebecca Raymond
(September, 2019)
Predicting the Obvious: A Machine Learning Approach to Superstar Inventions

Georg Alexander Rickmann
(February, 2020)
The Effect of Market Transparency on Corporate Disclosure

Jad Georges Sassine
How Network Structure Impacts Socially Reinforced Diffusion?

Parinitha R. Sastry
Estimating Demand for Liquid Assets

Bryan Seegmiller
Intermediation Frictions in Equity Markets

Albert Shin
(February, 2020)
Startup Valuation and the Venture Capital Syndication Hypothesis

Sebastian Steffen
(February, 2020)
Occupational Change: Automation and Reskilling Risks

Yupeng Wang
Fintech Mortgage Lenders Solving or Exploiting a Friction? Evidence on Risk Layering and Prepayment Risk of Conforming Loans

Zhen Yang
Learning Who to Target with What via Adaptive Experimentation to Optimize Long-Term Outcomes

Yuting Zhu
Dynamic Marketing Policies: Constructing Markov States for Reinforcement Learning

Master of Science in Operations Research

Katherine Lee Burnham
Information Fusion for an Unmanned Underwater Vehicle Through Probabilistic Prediction and Optimal Matching

Or Dan
(See also M.B.A., Course XV)
Improving Prior Knowledge Assessment in Process Characterization

Matt Vincent Lewis Emschwiller
Understanding Neural Network Sample Complexity and Interpretable Convergence-Guaranteed Deep Learning with Polynomial Regression

Justin W. Graham
School Choice: A Discrete Optimization Approach

Galit Lukin
Prescriptive Methods for Adaptive Learning

Colin Alex McIntyre
(See also M.B.A., Course XV)
Optimizing Inbound Freight Mode Decisions

Julie Poullet
Leveraging Machine Learning to Solve the Vehicle Routing Problem with Time Windows

Rebecca Zhang
(September, 2019)
Interpretable Machine Learning Methods for Stroke Prediction

SCHOOL OF ARCHITECTURE AND PLANNING, DOCTORAL

Doctor of Philosophy

School of Architecture and Planning

Dhamnidhi Dhaval Kumar Adjodah
(September, 2019)
Thesis in the field of Media Arts and Sciences: Social Inductive Biases for Reinforcement Learning

Jesus Ricardo Alvarez Felix
Thesis in the field of Urban and Regional Planning submitted to the Department of Urban Studies and Planning: Sensing Lights: Transforming Street Lights into a Networked Urban Knowledge Platform

Nisa Ari
(September, 2019)
Thesis in the field of Architecture: History and Theory of Art submitted to the Department of Architecture: Cultural Mandates, Artistic Missions, and "The Welfare of Palestine," 1876–1948

Andrea Karin Beck
Thesis in the field of Sustainable Development submitted to the Department of Urban Studies and Planning: Water Operator Partnerships: Utility Reform and the Struggle for Alternatives to Privatization

Yasmin Bijani
(September, 2019)
Thesis in the field of Environmental Policy and Planning submitted to the Department of Urban Studies and Planning: Pursuing the Common Good: Overcoming Barriers to Collective Action through Transboundary Water Negotiation along the Blue Nile River

Benjamin Arthur Philips Bloomberg
(February, 2020)
Thesis in the field of Media Arts and Sciences: Making Musical Magic Live: Inventing Modern Production Technology for Human-Centric Music Performance

Lilian D. Bui
(February, 2020)
Thesis in the field of Urban and Regional Planning submitted to the Department of Urban Studies and Planning: Centering Peripheries: Warning Systems and Disaster Risk Reduction Planning on the Island City

Samuel Eli Calisch
(September, 2019)
Thesis in the field of Media Arts and Sciences: Folded Functional Foams

Matthew Eli Carney
(February, 2020)
Thesis in the field of Media Arts and Sciences: Design and Evaluation of a Reaction-Force Series Elastic Actuator Configurable as Biomimetic Powered Ankle and Knee Prostheses

Matthew Christopher Claudel
Thesis in the field of Advanced Urbanism submitted to the Department of Urban Studies and Planning: How Cities Learn: Urban Experimentation for Creating and Governing Technology

Pierre Emmanuel Cuvilliers
Thesis in the field of Architecture: Building Technology submitted to the Department of Architecture: The Constrained Geometry of Structures: Optimization Methods for Inverse Form-Finding Design

Jackson Struthers Davidow
(September, 2019)
Thesis in the field of Architecture: History and Theory of Art submitted to the Department of Architecture: Viral Visions: Art, Activism, and Epidemiology in the Global AIDS Pandemic

Laura Humm Delgado
Thesis in the field of Urban and Regional Planning submitted to the Department of Urban Studies and Planning: Branching Out into Immigrant Neighborhoods: How Public Libraries Distribute Community Resources to Meet Immigrant Needs

Artem Dementyev
(September, 2019)
Thesis in the field of Media Arts and Sciences: Dynamic Wearable Technology: Designing and Deploying Small Climbing Robots for Sensing and Actuation on the Human Body

Jorge Duro Royo
(September, 2019)
Thesis in the field of Media Arts and Sciences: Fabrication Information Modeling

Daniel Gallagher
(September, 2019)
Thesis in the field of Urban Planning and International Development submitted to the Department of Urban Studies and Planning: Enduring or Escaping Legacies? Politics, Inherited Institutions, and Rebellion in the Struggle Over Water Futures in Chile

Jessica Alexandra Gordon
(September, 2019)
Thesis in the field of Environmental Policy and Planning submitted to the Department of Urban Studies and Planning: Red Lines for a Green China: Adaptation, Negotiation and Experimentation in China's Efforts to Transform Sustainably

Jason Matthew Haas
(September, 2019)
Thesis in the field of Media Arts and Sciences: Committee of N: Playful Design in Teacher Education

Elise Schley Harrington
Thesis in the field of Environmental Policy and Planning submitted to the Department of Urban Studies and Planning: Intermediaries and Electrification: Dimensions of Trust and Consumer Education in Kenya's Off-Grid Solar Market

Suzanne Elisa Harris-Brandts
Thesis in the field of Urban and Regional Studies submitted to the Department of Urban Studies and Planning: Constructing the Capital City: The Politics of Urban Development and Image Making in Eurasia's Hybrid Regimes

Natasha Jaques
(February, 2020)
Thesis in the field of Media Arts and Sciences: Social and Affective Machine Learning

Sundeep Kumar Jolly
(September, 2019)
Thesis in the field of Media Arts and Sciences: Holographic Augmented Reality: Towards Near-to-Eye Electroholography via Guided-Wave Acousto-Optics

Rébecca Henriette Marie Franca Kleinberger
Thesis in the field of Media Arts and Sciences: Vocal Connection: Rethinking the Voice as a Medium for Personal, Interpersonal, and Interspecies Understanding

Haegi Kwon
(September, 2019)
Thesis in the field of Urban and Regional Studies submitted to the Department of Urban Studies and Planning: Fighting for Recognition: Asian American Advocates and Their Strategic Uses of Identity

Will Kai Langford
(September, 2019)
Thesis in the field of Media Arts and Sciences: Discrete Robotic Construction

Yan Leng
Thesis in the field of Media Arts and Sciences: Collective Behavior over Social Networks with Data-driven and Machine Learning Models

Mohammad Omar Masud
Thesis in the field of Urban and Regional Studies submitted to the Department of Urban Studies and Planning: Inside the App Bureaucracy: The Use of Smartphone Apps in Public Service Delivery Organizations in Pakistan

Paul Mayencourt
(February, 2020)
Thesis in the field of Architecture: Building Technology submitted to the Department of Architecture: Mass Reduction: Opportunities and Structural Optimization Methods to Reduce Material Use in Mass Timber Buildings

Philippa Jane Mothersill
(February, 2020)
Thesis in the field of Media Arts and Sciences: Towards Digital Liminality: Computational Tools for 'Beyond Average' Creative Thinking

Alejandro Noriega Campero
(September, 2019)
Thesis in the field of Media Arts and Sciences: Human and Artificial Intelligence in Decision Systems for Social Development

Prashant Jaya-Tarachand Patil
(September, 2019)
Thesis in the field of Media Arts and Sciences: Laser Direct-Write Fabrication of MEMS

Prassanna Raman
Thesis in the field of International Development submitted to the Department of Urban Studies and Planning: The Politics of Visibility in Urban Sanitation: Bureaucratic Coordination and the Swachh Bharat Mission in Tamil Nadu, India

Karthik Rao Cavale
(February, 2020)
Thesis in the field of Urban and Regional Studies submitted to the Department of Urban Studies and Planning: The Production of Rurality: Social and Spatial Transformations in the Tamil Countryside 1915-65

Jeffrey Laurence Rosenblum
Thesis in the field of Urban and Regional Planning submitted to the Department of Urban Studies and Planning: Expanding Access to the City: How Public Transit Fare Policy Shapes Travel Decision Making and Behavior of Low-Income Riders

Spencer Franklin Russell
Thesis in the field of Media Arts and Sciences: Resynthesizing Volumetric Soundscapes: Low-Rank Subspace Methods for Soundfield Estimation and Reconstruction

Sunanda Sharma
Thesis in the field of Media Arts and Sciences: Designing the Organism-Environment Relationship

Faizan Jawed Siddiqi
(February, 2020)
Thesis in the field of Urban Studies and Planning submitted to the Department of Urban Studies and Planning: Realizing Dignity: Dalit Rights, Land Reform, and the Learning of Democratic Citizenship

Ivan Sergeevich Sysoev
Thesis in the field of Media Arts and Sciences: Digital Expressive Media for Supporting Early Literacy through Child-Driven, Scaffolded Play

Cameron Roy Taylor
Thesis in the field of Media Arts and Sciences: Magnetomicrometry: Tissue Length Tracking via Implanted Magnetic Beads

Sara Ann Taylor
Thesis in the field of Media Arts and Sciences: Forecasting Mental Distress Using Healthcare Claims Data

Louis Lawton Thomas
(September, 2019)
Thesis in the field of Urban Planning, Policy and Design submitted to the Department of Urban Studies and Planning: High-Density Parenting: Design, Policy, and Family-oriented Urbanism

Shenhao Wang
(February, 2020)
Thesis in the field of Computer and Urban Science submitted to the Department of Urban Studies and Planning: Deep Neural Networks for Choice Analysis

Anneli Rane Woolf
Thesis in the field of Media Arts and Sciences: Discovering the Meaning Behind the Story: Creating a System for Documenting and Supporting Children's Narrative Development

Çağrı Hakan Zaman
(February, 2020)
Thesis in the field of Architecture: Design and Computation submitted to the Department of Architecture: Spatial Experience in Humans and Machines

SCHOOL OF ENGINEERING, DOCTORAL

Doctor of Philosophy

School of Engineering

Michael John Acton
(February, 2020)
Thesis in the field of Nuclear Science and Engineering: Computational Fluid Dynamics and Turbulence Model Uncertainty Quantification for Nuclear Reactor Safety Applications

Ganesh Ajjanagadde
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Fourier Analysis on the Hypercube, the Coefficient Problem, and Applications

Joshua H. Alman
(September, 2019)
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Linear Algebraic Techniques in Algorithms and Complexity

David Alvarez Melis
(September, 2019)
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Optimal Transport in Structured Domains: Algorithms and Applications

Raichelle Joy Aniceto
(February, 2020)
Thesis in the field of Space Systems submitted to the Department of Aeronautics and Astronautics: 100 Gbps Optical Coherent Modem for Low Earth Orbit Optical Inter-Satellite Links

Nicha Apichitsopa
Thesis in the field of Electrical Engineering and Computer Science: Large-Area Cell-Tracking Cytometry for Biophysical Measurements of Single Cells

Venkata Narayana Murthy Arelekatti
(September, 2019)
Thesis in the field of Mechanical Engineering: Frameworks for the Design of Passive Prosthetic Knee Components Using User-centered Methods and Biomechanics of Level-ground Walking

Naveed Ali Bakh
Thesis in the field of Chemical Engineering: In Vivo Translation of Near Infrared Fluorescent Semiconducting Single Walled Carbon Nanotube Sensors: Theoretical and Experimental Applications

Ashvin Reddy Bashyam
(September, 2019)
Thesis in the field of Electrical Engineering and Computer Science: Portable Magnetic Resonance Sensors and Methods for Noninvasive Disease Diagnostics

Tristan Wendland Bepler
(February, 2020)
Thesis in the field of Computational and Systems Biology: Machine Learning for Understanding Protein Sequence and Structure

Nikhil Gaurev Bhargava
(February, 2020)
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Multi-Agent Coordination Under Limited Communication

Mohamed Aziz Bhouri
(February, 2020)
Thesis in the field of Mechanical Engineering and Computation submitted to the Department of Mechanical Engineering: A Two-Step Port-Reduced Reduced-Basis Component Method for Time Domain Elastodynamic PDE with Application to Structural Health Monitoring

Gerardo Bledt
(February, 2020)
Thesis in the field of Mechanical Engineering: Regularized Predictive Control Framework for Robust Dynamic Legged Locomotion

Joseph Richard Brady
Thesis in the field of Chemical Engineering: A Multi-Omics Approach to Improving Productivity of Therapeutic Proteins in *Pichia pastoris* (*Komagataella phaffii)*

Alexander Thomas Brown
(February, 2020)
Thesis in the field of Biological Engineering: Design of Engineerable Biomaterial Microenvironments for the Advancement of *in vitro* Human Tissue Models

Scott Patrick Burger
(September, 2019)
Thesis in the field of Engineering Systems: Rate Design for the 21st Century: Improving Economic Efficiency and Distributional Equity in Electricity Rate Design

Colin G. Buss
(February, 2020)
Thesis in the field of Medical Engineering and Medical Physics submitted to the Harvard-MIT Program in Health Sciences and Technology: Nanomaterial-Mediated Immune Interactions for Disease Diagnosis and Cancer Immunotherapy

Yinan Cai
(September, 2019)
Thesis in the field of Nuclear Science and Engineering: A Framework for Analyzing Nuclear Power Multiunit Accident Scenarios and Providing Accident Mitigation and Site Improvement Suggestions

Andrew Harvey Caldwell
(February, 2020)
Thesis in the field of Materials Science and Engineering: Alternating Current Voltammetry of High Temperature Electrolysis Reactions

Norman Ming-Chen Cao
Thesis in the field of Applied Plasma Physics submitted to the Department of Nuclear Science and Engineering: Characterization of a Turbulence Bifurcation Underlying L-mode Confinement Transitions on Alcator C-Mod

Hugh Alexander Carson
(February, 2020)
Thesis in the field of Computational Science and Engineering: Provably Convergent Anisotropic Output-Based Adaptation for Continuous Finite Element Discretizations

Seth Allen Cazzell
Thesis in the field of Polymers and Soft Matter submitted to the Department of Materials Science and Engineering: Engineering Gelation in Metal Ion Cross-Linked Hydrogels

Wui Yarn Chan
(September, 2019)
(See also S.M., Course X-A)
Thesis in the field of Chemical Engineering: Sustainable Materials from Renewable Protein Feedstock and Waste Rubber

Ken Chang
Thesis in the field of Medical Engineering and Medical Physics submitted to the Harvard-MIT Program in Health Sciences and Technology: Enhancing Medical Imaging Workflows with Deep Learning

Christy Chao
(February, 2020)
Thesis in the field of Chemical Engineering: Analysis of DNA Damage and Repair Responses in Cerium Exposed Cells and Hepatocyte Spheroids

Nikhil Narsingh Chavan Dafle
Thesis in the field of Mechanical Engineering: Dexterous Manipulation with Simple Grippers

Jialiang Chen
(September, 2019)
Thesis in the field of Civil and Environmental Engineering: Effect of Scale and Spatial Variability on Surface Foundations on Sand

Mo Chen
(February, 2020)
Thesis in the field of Quantum Science and Engineering submitted to the Department of Mechanical Engineering: Hardware-Efficient Quantum Error Correction with Nitrogen-Vacancy Centers

Tianyi Chen
(September, 2019)
Thesis in the field of Mechanical Engineering: Next-Generation Dedicated Outdoor Air Cooling Systems for Low-Energy Buildings

Craig B. Cheney
(February, 2020)
Thesis in the field of Mechanical Engineering: Development of a Miniature, Low Power, Solid State, Continuously Sensitive, Diffusion Cloud Chamber

Li-Chiun Cheng
Thesis in the field of Chemical Engineering: Structure, Rheology and Applications of Thermally-Gelling Nanoemulsions

Mei Yi Cheung
(September, 2019)
Thesis in the field of Mechanical Engineering: Underwater Multi-Vehicle Co-operative Target-Tracking

Arnav Chhabra
(September, 2019)
Thesis in the field of Health Sciences and Technology submitted to the Harvard-MIT Program in Health Sciences and Technology: Building Blocks for Regenerative Medicine: Vascularized Models and Immunomodulation to Engineer Hepatic Cell Therapies

Byung Gu Cho
(February, 2020)
Thesis in the field of Ocean Engineering submitted to the Department of Mechanical Engineering: Predicting the Effects of Random Ocean Dynamic Processes on Underwater Acoustic Sensing and Communication

Te-Chun Chu
Thesis in the field of Chemical Engineering: Revealing Aromatics Formation in Combustion Using Experimental and Modeling Methods

Hyung Won Chung
(February, 2020)
Thesis in the field of Mechanical Engineering: Technoeconomic Analysis of Pressure-Retarded Osmosis

Sebastian Claici
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Structure as Simplification: Transportation Tools for Understanding Data

Theresa Kruse Cloutier
Thesis in the field of Chemical Engineering: Computational Design of Therapeutic Monoclonal Antibody Formulations

Anne Collin
(September, 2019)
Thesis in the field of Autonomous Systems submitted to the Department of Aeronautics and Astronautics: A Systems Architecture Framework towards Hardware Selection for Autonomous Navigation

Laura Ellen Crowell
Thesis in the field of Chemical Engineering: Accelerating Process Development forBiologics on an Automated, Pharmacy-Scale Manufacturing System

Wenhan Dai
(February, 2020)
Thesis in the field of Communications and Networks submitted to the Department of Aeronautics and Astronautics: Quantum Networks: State Transmission and Network Operation

Pratik K. Davé
(February, 2020)
Thesis in the field of Space Systems submitted to the Department of Aeronautics and Astronautics: Autonomous Navigation of Distributed Spacecraft using Intersatellite Laser Communications

Karen Margaret Dawson
(September, 2019)
Thesis in the field of Nuclear Science and Engineering: A Framework to Assess the Economic and Uncertainty Implications for Technologies for Use in Decarbonization

Nicholas Thomas Dee
(February, 2020)
Thesis in the field of Mechanical Engineering: In Situ Monitoring and Control of Carbon Nanotube Synthesis

Akshay Dhananjai Degwekar
(September, 2019)
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: On Foundations of Public-Key Encryption and Secret Sharing

Íñigo del Portillo Barrios
(February, 2020)
Thesis in the field of Communications and Networks submitted to the Department of Aeronautics and Astronautics: Space and Aerial Architectures to Expand Global Connectivity

Etienne Demarly
(February, 2020)
Thesis in the field of Nuclear Science and Engineering: A New Approach to Predicting Departure from Nucleate Boiling (DNB) from Direct Representation of Boiling Heat Transfer Physics

Mo Deng
Thesis in the field of Electrical Engineering and Computer Science: Deep Learning with Physical and Power-Spectral Priors for Robust Image Inversion

Guillermo Fabián Díaz Lankenau
(February, 2020)
Thesis in the field of Mechanical Engineering: Tractor Design for Small Farms in Resource Limited Markets

Sai Nishanth Dikkala
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Tacking Dependence Among Samples Via Structured High-Dimensional Distributions

Christina Vy Dinh
(February, 2020)
Thesis in the field of Chemical Engineering: Development of Quorum-Sensing Circuits for Metabolic Flux Control in Escherichia Coli

Daniel S. Dorsch
(September, 2019)
Thesis in the field of Mechanical Engineering: Design of High Performance Hybrid Transmissions

Justin M. Dove
Thesis in the field of Electrical Engineering and Computer Science: Theory of Phasor-Field Imaging

Shelby Kathleen Doyle
(February, 2020)
Thesis in the field of Biological Engineering: Modulating Oncogenic Transcription with Small Molecules

Aaron James Dy
(September, 2019)
Thesis in the field of Biological Engineering: Cell-free Synthetic Biology for Affordable, On-demand Diagnostics

Markus Einzinger
(February, 2020)
Thesis in the field of Electrical Engineering submitted to the Department of Electrical Engineering and Computer Science: Excitonic Spin Engineering for Solar Cells and Organic Light-Emitting Diodes

Eric Richard Fadel
Thesis in the field of Materials Science and Engineering: Highly Accurate Computational Methods For Lithium-Ion Battery Materials

Nima Fazeli
(September, 2019)
Thesis in the field of Mechanical Engineering: Inference and Learning for Rigid-Body Models of Manipulation

Henry Alan Fingerhut
(February, 2020)
Thesis in the field of Engineering Systems: Technology, Management, and Policy submitted to the Engineering Systems Division: Individual and Organizational Uses of Evidence-Based Practice in Healthcare Settings

Michael Samuel Fleder
(September, 2019)
Thesis in the field of Electrical Engineering and Computer Science: Forecasting Financials and Discovering Menu Prices with Alternative Data

Peter Raymond Florence
(February, 2020)
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Dense Visual Learning for Robot Manipulation

Mojtaba Forghani
(September, 2019)
Thesis in the field of Mechanical Engineering and Computation submitted to the Department of Mechanical Engineering: An Inverse Problem Framework for Reconstruction of Phonon Properties Using Solutions of the Boltzmann Transport Equation

Christopher Foy
Thesis in the field of Electrical Engineering submitted to the Department of Electrical Engineering and Computer Science: Solid-State Spin-Integrated Circuits for Quantum Sensing and Control

Matthias Freiherr von Andrian-Werburg
Thesis in the field of Chemical Engineering: Fast Stochastic Model Predictive Control under Parametric Uncertainties

Xinkai Fu
(September, 2019)
Thesis in the field of Materials Science and Engineering: Assessing Byproduct Mining and Metal Recyclig as Indicators of Material Criticality

Paul Anthony Gabrys
Thesis in the field of Materials Science and Engineering: Controlling Structure Across Length Scales with Directed Assembly of Colloidal Nanoparticles

Preetinder Garcha
Thesis in the field of Electrical Engineering and Computer Science: Low Power Circuits with Integrated Magnetics for Sensors and Energy Harvesting Systems

Derek Ray Gaston
(February, 2020)
Thesis in the field of Computational Nuclear Science and Engineering: Parallel, Asynchronous Ray-Tracing for Scalable, 3D, Full-Core Method of Characteristics Neutron Transport on Unstructured Mesh

Joseph Emilio Gaudio
Thesis in the field of Mechanical Engineering: Fast Learning and Adaptation in Control and Machine Learning

Roman O. Geykhman
(September, 2019)
Thesis in the field of Aeronautics and Astronautics: The Effect of Differential Color Refraction on Astrometric Observations of Solar System Bodies and Earth Satellites from Ground-Based Optical Telescopes

Henri-Louis Jean-Paul Girard
(February, 2020)
Thesis in the field of Mechanical Engineering: Interactions at Interfaces Across Scales: from Adsorption to Adhesion

Mark Jacob Goldman
(February, 2020)
Thesis in the field of Chemical Engineering: Illuminating Reaction Pathways in Low-Temperature Combustion, Pyrolysis & Atmospheric Oxidation

Sarah Ann Goodman
(February, 2020)
Thesis in the field of Materials Science and Engineering: Nanostructured Materials Towards High-Efficiency Visible and Ultraviolet Light Emitting Diodes: Structure-Property Correlation on the Nanoscale

Grace Swee See Goon
Thesis in the field of Materials and Structures submitted to the Department of Aeronautics and Astronautics: Deformation-Assisted Antifouling of Surfaces

Colin Andreas Grambow
Thesis in the field of Chemical Engineering: Automated Discovery of Important Chemical Reactions

Daniel Thomas Grier
(September, 2019)
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Three Complexity Classification Questions at the Quantum/Classical Boundary

Zongyu Gu
(September, 2019)
Thesis in the field of Chemical Engineering: Physics-Based Models of Hysteresis in Multiphase Flow in Porous Media

Jacob William Guggenheim
(February, 2020)
Thesis in the field of Mechanical Engineering: Contributions of the Human Operator to Supernumerary Robotic Limbs

Ishan Gupta
(September, 2019)
Thesis in the field of Biological Engineering: Increasing the Optical Transparency of a Living Mouse Brain (And Other Nanotechnologies)

David Henry Hagan
(February, 2020)
Thesis in the field of Environmental Chemistry submitted to the Department of Civil and Environmental Engineering: Measuring Ambient Air Quality Using Low-Cost Sensors

Bashar M. Hamza
(February, 2020)
Thesis in the field of Electrical Engineering and Computer Science: An Optofluidic Platform for Longitudinal Circulating Tumor Cell Studies in Mouse Models of Cancer

Yafei Han
(September, 2019)
Thesis in the field of Transportation submitted to the Department of Civil and Environmental Engineering: Neural-Embedded Discrete Choice Models

Yiou He
(February, 2020)
Thesis in the field of Electrical Engineering submitted to the Department of Electrical Engineering and Computer Science: Towards Lightweight High-Voltage Power Conversion

Marek Hempel
Thesis in the field of Electrical Engineering submitted to the Department of Electrical Engineering and Computer Science: Technology and Applications of 2D Materials in Micro- and Macroscale Electronics

Wee Teck William Ho
Thesis in the field of Chemical Engineering: Orthotopic Liver Metastasis Mouse Models of Mismatch Repair-Proficient Colorectal Cancer Recapitulate Clinical Inefficacy of Immune Checkpoint Blockade

Francois Robert Hogan
(February, 2020)
Thesis in the field of Mechanical Engineering: Reactive Manipulation with Contact Models and Tactile Feedback

Hajir Hosseini Roozbehani
(September, 2019)
Thesis in the field of Communications and Networks submitted to the Department of Aeronautics and Astronautics: Graceful Codes: Fundamental Limits and Constructions

I-Yun Lisa Hsieh
Thesis in the field of Chemical Engineering: Insights into Future Electric Mobility

Chen-Yu Hsu
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Passive Sensing of User Behavior and Well-Being at Home

Wei-Ning Hsu
Thesis in the field of Electrical Engineering and Computer Science: Speech Processing with Less Supervision: Learning from Weak Labels and Multiple Modalities

Zhi Hu
Thesis in the field of Electrical Engineering and Computer Science: Large-Scale High-Density Terahertz Radiator and Receiver Arrays on Silicon Chips

Arthur C. Huang
(February, 2020)
Thesis in the field of Aerospace Computational Engineering submitted to the Department of Aeronautics and Astronautics: An Adaptive Variational Multiscale Method with Discontinuous Subscales for Aerodynamic Flows

Junbin Huang
Thesis in the field of Mechanical Engineering and Computation submitted to the Department of Mechanical Engineering: New Overlapping Finite Elements and Their Application in the AMORE Paradigm

Mantao Huang
Thesis in the field of Materials Science and Engineering: Voltage Control of Electrical, Optical and Magnetic Properties of Materials by Solid State Ionic Transport and Electrochemical Reactions

Yi Huang
Thesis in the field of Mechanical Engineering: Spectral Engineering for Solar-Thermal and Thermal-Radiative Systems

Fatima Aysha Hussain
Thesis in the field of Environmental Microbiology submitted to the Department of Civil and Environmental Engineering: Virus-Driven Evolution of Marine *Vibrio*

Karine Ip Kiun Chong
(September, 2019)
Thesis in the field of Mechanical Engineering: Holistic Modeling and Evaluation of Material Recovery from Materially-Complex End-of-Life Vehicles

Jon Paul Janet
(February, 2020)
Thesis in the field of Chemical Engineering and Computation: Multifidelity Methods for Design of Transition Metal Complexes

Mark Christopher Jeffrey
(February, 2020)
Thesis in the field of Electrical Engineering and Computer Science: A Hardware and Software Architecture for Pervasive Parallelism

Taehoon Jeong
Thesis in the field of Electrical Engineering submitted to the Department of Electrical Engineering and Computer Science: Secure Analog-to-Digital Conversion Against Power Side-Channel Attack

Ana Jevtić
Thesis in the field of Electrical Engineering and Computer Science: Advanced Methods for Cyber-Attack Detection and Resilient State Estimation in Power Systems

Pritish Kamath
(February, 2020)
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Some Hardness Escalation Results in Computational Complexity Theory

Sai Nithin Reddy Kantareddy
Thesis in the field of Mechanical Engineering: Introducing Perovskites to the IoT World Using Photovoltaic-Powered ID Tags

Jian-An Ke
Thesis in the field of Materials Science and Engineering: Guided Etching and Deposition of Transition Metal Dichalcogenides

Jared Scott Kehe
Thesis in the field of Biological Engineering: Massively Parallel Combinatorial Microbiology

Sami Khan
(February, 2020)
Thesis in the field of Mechanical Engineering: Towards Impacting Electrochemical Phenomena Using Interfacial Engineering

Aliza Khurram
Thesis in the field of Mechanical Engineering: Combined CO2 Capture and Electrochemical Conversion in Non-Aqueous Environments

Deokhwan Kim
(September, 2019)
Thesis in the field of Electrical Engineering and Computer Science: Verification of Correctness Properties of Programs that Read Input Files

Donghyun Kim
Thesis in the field of Mechanical Engineering: Design and Development of Desktop Fiber and Fabric Manufacturing System for Advanced Materials

Joseph Kim
(February, 2020)
Thesis in the field of Autonomous Systems submitted to the Department of Aeronautics and Astronautics: Plan Summarization for Decision Support in Human Team Planning

Sungjin Kim
Thesis in the field of Materials Science and Engineering: Utilizing Bioinspired Metal-Coordinate Bonding in the Solidification of Soft Gels via Crosslinking, Dehydration and Mineralization

Yunjo Kim
Thesis in the field of Mechanical Engineering: Interface Engineering for Exfoliation and Integration of Heteroepitaxial III-V Films

Jesse D. Kirkpatrick
Thesis in the field of Medical Engineering and Medical Physics submitted to the Harvard-MIT Program in Health Sciences and Technology: Protease activity sensors for noninvasive diagnosis and monitoring of pulmonary diseases

Derek M. Kita
(February, 2020)
Thesis in the field of Materials Science and Engineering: Integrated Photonic Devices for Spectroscopic Chemical Detection

Fredrik Berg Kjølstad
(February, 2020)
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Sparse Tensor Algebra Compilation

Magdalena Maria Klemun
(February, 2020)
Thesis in the field of Engineering Systems: Soft and Hard Factors Affecting the Performance Evolution of Low-Carbon Energy Technologies

Frans Anton Koolen
(February, 2020)
Thesis in the field of Electrical Engineering and Computer Science: Balance Control and Locomotion Planning for Humanoid Robots Using Nonlinear Centroidal Models

Akshata Krishnamurthy
(February, 2020)
Thesis in the field of Space Systems submitted to the Department of Aeronautics and Astronautics: Instrument Systematics Calibration and Performance Validation for High Precision Photometry Missions

Adam QingYang Kuang
(September, 2019)
Thesis in the field of Applied Plasma Physics submitted to the Department of Nuclear Science and Engineering: Measurements of Divertor Target Plate Conditions and Their Relationship to Scrape-Off Layer Transport

Omar Labban
Thesis in the field of Mechanical Engineering: Development of Chemical-Free Methods of Fouling Mitigation for Membrane Processes in Desalination

Erica L. Lai
(February, 2020)
Thesis in the field of Polymers and Soft Matter submitted to the Department of Materials Science and Engineering: Deciphering How the Viscoelastic Properties of Mussel-inspired Metal-coordinate Hydrogels Dictate Their Adhesive and Interfacial Mechanics

Kristen Rio LaVigne
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Relationships Between Functionality, Security, and Privacy

David Layden
Thesis in the field of Quantum Science and Engineering submitted to the Department of Nuclear Science and Engineering: Device- and Application-Adapted Quantum Error Correction

David Lazar
(February, 2020)
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Strong and Scalable Metadata Security for Voice Calls

Ilia Andreevich Lebedev
(February, 2020)
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Trust Less: Shrinking the Trusted Parts of Trusted Systems

Hin Yeung Lee
Thesis in the field of Nuclear Science and Engineering: Multiple Monoenergetic Gamma Radiography (MMGR) Using Compact Superconducting Cyclotron

Hyodong Lee
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Topographic Deep Artificial Neural Network as a Model of Primate Ventral Visual Stream

Jinwook Lee
(September, 2019)
Thesis in the field of Air-Breathing Propulsion submitted to the Department of Aeronautics and Astronautics: Characterization and Mitigation of Blade Waviness Effects on Fan Performance

Michael Andrew Lee
(September, 2019)
Thesis in the field of Chemical Engineering: In Vivo Steroid Sensing Using Corona Phase Molecular Recognition: Design, Synthesis, and Applications

William Mitchell Leiserson
(February, 2020)
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Defining Scalable High Performance Programming with DEF

Chengtao Li
(February, 2019)
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Diversity-Inducing Probability Measures for Machine Learning

Duanhui Li
(September, 2019)
Thesis in the field of Materials Science and Engineering: Micro Optics for Micro Hybrid Concentrator Photovoltaics

Zhuoxuan Li
(February, 2020)
Thesis in the field of Mechanical Engineering: Open Source Hardware Entrepreneurship

Youzhi Liang
(February, 2020)
Thesis in the field of Mechanical Engineering: Analysis and Algorithms for Parametrization, Optimization and Customization of Sled Hockey Equipment and Other Dynamical Systems

Kathy S. Lin
(February, 2020)
Thesis in the field of Computational and Systems Biology: Biochemically Informed Modeling of miRNA Targeting Efficacy

Shaoting Lin
(September, 2019)
Thesis in the field of Mechanical Engineering: Tissue-like Hydrogels by Design

Yuxuan Lin
(September, 2019)
Thesis in the field of Electrical Engineering submitted to the Department of Electrical Engineering and Computer Science: Infrared Detectors Based on Two-Dimensional Materials and Heterostructures

William Robin Lindemann
Thesis in the field of Materials Science and Engineering: Dynamics Characterization for Designing Functional Soft Materials

Changyang Linghu
(February, 2020)
Thesis in the field of Electrical Engineering and Computer Science: Spatially Organized Fluorescent Reporters for Recording Complex Biological Dynamics in Cell Population

Mengjie Liu
(February, 2020)
Thesis in the field of Chemical Engineering: Predictive Modeling of Polycyclic Aromatic Hydrocarbon Formation During Pyrolysis

Tianren Liu
(September, 2019)
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Breaking Barriers in Secret Sharing

Yun Liu
(September, 2019)
Thesis in the field of Materials Science and Engineering: First-principles Studies of Defects in Colloidal Nanocrystals

Zhaoyuan Liu
(February, 2020)
Thesis in the field of Nuclear Science and Engineering: Cumulative Migration Method for Computing Multi-Group Transport Cross Sections and Diffusion Coefficients with Monte Carlo Calculations

Alan Everett Long
(See also M.B.A., Course XV)
Thesis in the field of Chemical Engineering Practice submitted to the Department of Chemical Engineering: A Study of Strained Extinction for Applications in Natural Gas Combustion Modeling

Erin Elizabeth Looney
Thesis in the field of Mechanical Engineering: Accelerating Cleantech Hardware Product Development

Daniel Lopez Martinez
(February, 2020)
Thesis in the field of Health Sciences and Technology submitted to the Harvard-MIT Program in Health Sciences and Technology: Machine Learning for Pain Assessment and Management

Christopher J. Love
(February, 2020)
Thesis in the field of Mechanical Engineering: An Injectable, Biomaterial-based Therapy to Promote Endogenous Neural Progenitor Cells in a Hemorrhagic Stroke Lesion

Yu Ma
Thesis in the field of Mechanical Engineering: Machine Learning in Ocean Applications: Wave Prediction for Advanced Controls of Renewable Energy and Modeling Nonlinear Viscous Hydrodynamics

Thomas Stephen Mahony
Thesis in the field of Electrical Engineering and Computer Science: A Hybrid Approach Towards On-Chip Visible Lasers

Dhanushkodi D. Mariappan
(September, 2019)
Thesis in the field of Mechanical Engineering: Nanoporous Flexographic Printing: Fundamentals, Applications and Scale-up

Erica Ellis Mason
(February, 2020)
Thesis in the field of Medical Engineering and Medical Physics submitted to the Harvard-MIT Program in Health Sciences and Technology: Magnetic Particle Imaging for Intraoperative Breast Cancer Margin Assessment and Functional Brain Imaging

Samantha A. McBride
(February, 2020)
Thesis in the field of Mechanical Engineering: Controlling Crystallization via Interfacial Engineering: Patterning, Fouling-Inhibition, and Nutrient Recovery

Saeed Mehraban
(September, 2019)
Thesis in the field of Electrical Engineering and Computer Science: The Computational Complexity of Sampling from a Weak Quantum Computer

Hayden Metsky
(February, 2020)
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Design Methods for Sensitive and Comprehensive Microbial Surveillance

Jinghui Miao
Thesis in the field of Materials Science and Engineering: Lithiation-induced Phase Transitions in Alloying Anodes for Thin Film Lithium-ion Batteries

Xia Miao
(February, 2020)
Thesis in the field of Electrical Engineering submitted to the Department of Electrical Engineering and Computer Science: Toward Distributed Control for Autonomous Electrical Energy Systems

Aleksandar S. Mijailovic
Thesis in the field of Mechanical Engineering: Measurement and Modeling of Brain Tissue and Engineered Polymer Response to Concentrated Impact Loading

Paolo Minelli
(February, 2020)
Thesis in the field of Nuclear Science and Engineering: Improved Methods for Managing Megaprojects

Marco Alexander Miotti
(February, 2020)
Thesis in the field of Engineering Systems: Variability in the Emissions Savings Potential of Battery Electric Vehicles Across Regions and Individuals

Yiming Mo
(September, 2019)
Thesis in the field of Chemical Engineering: Continuous Processing of Multiphase Reactions for Pharmaceutical Applications

Seyed Sina Moeini Ardakani
(September, 2019)
Thesis in the field of Structures and Materials submitted to the Department of Civil and Environmental Engineering: Light Interstitials in Iron Under Extreme Mechanical Conditions

Brinda Monian
(February, 2020)
Thesis in the field of Chemical Engineering: Bioinformatic Tools for Single-Cell Clinical Studies in Food Allergy

Justin Bruce Montgomery
(February, 2020)
Thesis in the field of Civil Engineering and Computation submitted to the Department of Civil and Environmental Engineering: Enhancement of Unconventional Oil and Gas Production Forecasting Using Mechanistic-Statistical Modeling

Apoorva Murarka
(September, 2019)
Thesis in the field of Electrical Engineering submitted to the Department of Electrical Engineering and Computer Science: Nanoscale Membranes For Electromechanical Systems

Antoni Maria Musolas Otaño
Thesis in the field of Computational Science and Engineering: Covariance Estimation on Matrix Manifolds

Maxwell Benjamin Nagarajan
Thesis in the field of Chemical Engineering: Microengineered Hydrogels for Spatially Resolved, Multiplexed MicroRNA Quantification from Tissue

Sara Nicole Nagelberg
(February, 2020)
Thesis in the field of Mechanical Engineering: Dynamic and Stimuli-Responsive Multi-Phase Emulsion Droplets for Optical Components

Sumaiya Nazeen
(September, 2019)
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Computational Methods for Functional Interpretation of Diverse Omics Data

Khoi Thien Nguyen
Thesis in the field of Biological Engineering: Epigenetic Determinants of Cellular Differentiation, Transcriptional Reprogramming, and Human Disease

Le Thanh Tu Nguyen
Thesis in the field of Biological Engineering: Engineering the Human Gut Microbiome Through Personalized Interventions

Xinchen Ni
(February, 2020)
Thesis in the field of Mechanical Engineering: Nanoengineered Hierarchical Advanced Composites with Nanofiber Interlaminar Reinforcement for Enhanced Laminate-Level Mechanical Performance

David Andrew Nicholson
(February, 2020)
Thesis in the field of Chemical Engineering: Molecular Simulation of Nucleation from Flowing Polymer Melts

James Noraky
Thesis in the field of Electrical Engineering and Computer Science: Algorithms and Systems for Low Power Time-of-Flight Depth Sensing

Noele Rosalie Norris
(September, 2019)
Thesis in the field of Electrical Engineering and Computer Science: Mechanistic Modeling of Bacterial Nutrient Uptake Strategies

Jelena Notaros
Thesis in the field of Electrical Engineering and Computer Science: Integrated Optical Phased Arrays: Augmented Reality, LiDAR, and Beyond

Colm O'Rourke
Thesis in the field of Electrical Engineering and Computer Science: Decentralized Power Systems: Reference-Frame Theory and Stability Region Generation

Michael Julian Orella
Thesis in the field of Chemical Engineering: Models Across Multiple Length Scales to Advance Biomass Upgrading

Amy Elizabeth Ousterhout
(September, 2019)
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Shenango: A System for Achieving High CPU Efficiency and Low Tail Latency in Datacenters

Wei Ouyang
(February, 2020)
Thesis in the field of Electrical Engineering submitted to the Department of Electrical Engineering and Computer Science: Hierarchical Selective Electrokinetic Concentration: the Universal Next-Generation Biomolecule Enrichment Technique for Molecular Diagnostics

Juan Felipe Oviedo Perhavec
Thesis in the field of Mechanical Engineering: Accelerated Development of Photovoltaics by Physics-Informed Machine Learning

Justin Michael Paloni
Thesis in the field of Chemical Engineering: Protein-Polymer Conjugate Arrays for Enhanced Biosensor Sensitivity and Selectivity

Gee hoon Park
(February, 2020)
Thesis in the field of Mechanical Engineering: Determining Phosphate Levels in Natural Water Using a Novel Electrochemical Measurement Device

Hoyoung Daniel Park
(September, 2019)
Thesis in the field of Chemical Engineering: Ion-exchanged Metal–Organic Frameworks for Industrially Relevant Catalysis Applications

Yongjin Park
(September, 2019)
Thesis in the field of Biological Engineering: Design and Debugging of Ultrastable Engineered Genetic Systems

John Lee Thompson Peebles, Jr.
(September, 2019)
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Fast Spectral Primitives for Directed Graphs

Cheng Peng
Thesis in the field of Electrical Engineering and Computer Science: Dynamically Programmable Surfaces for High-Speed Optical Modulation and Detection

Santiago Nicolas Perez De Rosso
(February, 2020)
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Declarative Assembly of Web Applications from Predefined Concepts

Rachel Martha Katims Perlman
Thesis in the field of Engineering Systems: Characterizing the Materials Footprint of a University Campus: Data, Methods, and Recommendations

Yewen Pu
(September, 2019)
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Making Fast Informative Queries with Learned Propagations

David Qiu
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Representation and Transfer Learning Using Information-Theoretic Approximations

Srinivasan Raghuraman
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Infrastructures for Secure Multiparty Computation

Ramya Ramakrishnan
(September, 2019)
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Error Discovery through Human-AI Collaboration

Antoine Ramier
(September, 2019)
Thesis in the field of Medical Engineering and Medical Physics submitted to the Harvard-MIT Program in Health Sciences and Technology: Optical Coherence Vibrography: A Quantitative Tool for Probing Auditory and Ocular Biomehcanics

Govind L. Ramnarayan
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Distributed Error Correction and Inference

Charles Garrett Rappazzo
Thesis in the field of Biological Engineering: Determination of Class II Peptide-MHC Repertoires and Recognition via Large Yeast-Displayed Libraries

Manan B. Raval
(February, 2020)
Thesis in the field of Electrical Engineering submitted to the Department of Electrical Engineering and Computer Science: Integrated Optical Phased Arrays for Three-Dimensional Display Applications

Samuel James Raymond
(February, 2020)
Thesis in the field of Civil Engineering and Computation submitted to the Department of Civil and Environmental Engineering: Combining Numerical Simulation and Machine Learning - Modeling Coupled Solid and Fluid Mechanics Using Mesh Free Methods

Ashley Brown Raynal
(September, 2019)
Thesis in the field of Mechanical Engineering: A Portable, Ultra-Low Cost NMR Device

Adrià Recasens Continente
(February, 2020)
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Learning Through Looking and Listening

William C. Records
Thesis in the field of Chemical Engineering: Virus-Enabled Design of High-Performing, Three-Dimensional Nanomaterials for Electrochemical Energy Applications

Arman Rezaee
(February, 2020)
Thesis in the field of Electrical Engineering and Computer Science: Towards a Cognitive Network Management and Control System

Mariana Rodriguez Buno
(February, 2020)
Thesis in the field of Computational Sciences and Civil Engineering submitted to the Department of Civil and Environmental Engineering: Modeling Multiphysics of Traveling Wave Reactor Spent Fuel Disposal in Deep Crystalline Host Rock

Ivo Rosa Montenegro
(February, 2020)
Thesis in the field of Geotechnical and Geoenvironmental Engineering submitted to the Department of Civil and Environmental Engineering: Numerical Modeling, Characterization, and Monitoring of the Seasonal Behavior of Expansive Clays

Jacob Roxon
(February, 2020)
Thesis in the field of Civil and Environmental Engineering: Role of City Texture in Identifying Drag Coefficients of Buildings to Prevent Hurricane Damage

William David Sanchez
Thesis in the field of Aeronautics and Astronautics: Toward Fuel-Efficient Formation Flying of an Observatory and External Occulter at Sun-Earth L2

Joseph David Sandt
(February, 2020)
Thesis in the field of Mechanical Engineering: Light Manipulation with Photonic Fibers and Optical Light Guides: Dynamic Structural Color and Light Distribution in Microalgae Cultures

Peter Jeffries Santos
Thesis in the field of Materials Science and Engineering: Self-Assembling Nanocomposite Tectons for Ordered Superlattices

Tuhin Sarkar
Thesis in the field of Electrical Engineering and Computer Science: Learning Structure from Unstructured Data

Luke Robert Schaeffer
(September, 2019)
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Examining All Possibilities: Classification Theorems and Quantum Computing

Jennifer Moffitt Schall
(See also M.B.A., Course XV)
Thesis in the field of Chemical Engineering Practice submitted to the Department of Chemical Engineering: Growth and Nucleation Kinetics in Continuous Antisolvent Crystallization Systems

Ian Schneider
(February, 2020)
Thesis in the field of Social and Engineering Systems submitted to the Institute for Data, Systems, and Society: Market Design Opportunities for an Evolving Power System

Adam Benjamin Gelernter Sealfon
(September, 2019)
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Keep it Secret, Keep it Safe: Privacy, Security and Robustness in an Adversarial World

Nestor Andres Sepulveda
Thesis in the field of Nuclear Science and Engineering: Decarbonization of Power Systems, Multi-Stage Decision-Making with Policy and Technology Uncertainty

Sarah Jane Shapiro
(September, 2019)
Thesis in the field of Chemical Engineering: Rational Hydrogel Design for Point-of-Care Diagnostics

Sam James Silva
(September, 2019)
Thesis in the field of Environmental Engineering and Computation submitted to the Department of Civil and Environmental Engineering: Investigating the Influence of Biosphere-Atmosphere Interactions on Atmospheric Chemistry and Composition

Diogo Silva Castilho
(September, 2019)
Thesis in the field of Aeronautics and Astronautics: Active Hazard Analysis Integration into Safety Management Systems

Mohamad Othman Sindi
(September, 2019)
Thesis in the field of Computational Science and Engineering submitted to the Department of Civil and Environmental Engineering: A Container-Based Lightweight Fault Tolerance Framework for High Performance Computing Workloads

André Cornelis Joseph Snoeck
Thesis in the field of Transportation submitted to the Department of Civil and Environmental Engineering: Strategic Last-Mile Distribution Network Design under Demand Uncertainty

Luis Rubén Soenksen Martínez
(February, 2020)
Thesis in the field of Mechanical Engineering: Cell-free Freeze-dried Synthetic Biology for Wearable Biotechnology Applications

Chuliang Song
Thesis in the field of Civil and Environmental Engineering: An Environment-Dependent Framework to Study Ecological Networks

Shriya Sruthi Srinivasan
(February, 2020)
Thesis in the field of Medical Engineering and Medical Physics submitted to the Harvard-MIT Program in Health Sciences and Technology: Rewiring Neural Conduits: Engineering Neuromuscular Tissues for Bidirectional Neuroprosthetic Interfacing

Matthew James Staib
Thesis in the field of Electrical Engineering and Computer Science: Learning and Optimization in the Face of Data Perturbations

Gregory Joseph Stein
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Representations for Intelligent Navigation in Unfamiliar Environments

Max Andrew Stockslager
Thesis in the field of Mechanical Engineering: Single-Cell Mass Measurements for Drug Susceptibility Testing in Cancer

Roman Mark Stolyarov
(February, 2020)
Thesis in the field of Health Sciences and Technology submitted to the Harvard-MIT Program in Health Sciences and Technology: Development and Validation of a Terrain Adaptive Prothesis Control System

Daniel DeWitt Strawser
(September, 2019)
Thesis in the field of Mechanical Engineering: Planning Under Uncertainty in Resource-Constrained Systems

Elise M. Strobach
(February, 2020)
Thesis in the field of Mechanical Engineering: Optically Transparent, Thermally Insulating and Soundproofing (OTTIS) Aerogel for High-Efficiency Window Applications

Cong Su
(February, 2020)
Thesis in the field of Nuclear Science and Engineering: Atomic Engineering on 2D Materials Using Electron Irradiation and Chemical Protection

Peter Xinyang Su
Thesis in the field of Materials Science and Engineering: Lead Chalcogenide Thin Film Materials and Processing for Infrared Photonic Devices

George Le-Le Sun
(September, 2019)
Thesis in the field of Biological Engineering: Engineering Yeast for Heavy Metal Waste Remediation

Weike Sun
Thesis in the field of Chemical Engineering: Advanced Process Data Analytics

Yongbin Sun
Thesis in the field of Mechanical Engineering and Computation submitted to the Department of Mechanical Engineering: Enhancing Internet of Things Experience in Augmented Reality Environments

Ki-Joo Sung
Thesis in the field of Chemical Engineering: Engineering Non-Immunoglobulin Binding Proteins for in vitro Diagnostic Tests

Justin Mark Swaney
(February, 2020)
Thesis in the field of Chemical Engineering: Scaling Up 3D Imaging, Analysis, and Culture of Complex Brain Models

Alvin Thong Lip Tan
(September, 2019)
Thesis in the field of Materials Science and Engineering: Direct-Write Assembly of Colloidal Materials

Scott Howard Tan
Thesis in the field of Mechanical Engineering: Neuromorphic Computing Systems: Crystalline Resistive Random Access Memory

Omer Tanović
(September, 2019)
Thesis in the field of Electrical Engineering and Computer Science: Optimal Nonlinear Digital Signal Processing: A Dynamical Systems Approach

Jacqueline Leah Thomas
Thesis in the field of Aeronautics and Astronautics: Systems Analysis of Community Noise Impacts of Advanced Flight Procedures for Conventional and Hybrid Electric Aircraft

Aniwat Tiralap
(February, 2020)
Thesis in the field of Mechanical Engineering: Aero-Thermal-Mechanical Interactions in Ultra High-Speed Micro Gas Turbines

Ioan Alin Tomescu Nicolescu
(February, 2020)
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: How to Keep a Secret and Share a Public Key (Using Polynomial Commitments)

Emily Anne Toomey
Thesis in the field of Electrical Engineering submitted to the Department of Electrical Engineering and Computer Science: Superconducting Nanowire Electronics for Alternative Computing

Jessica Jane Tordoff
Thesis in the field of Computational and Systems Biology: Engineering Self-Assembling Living Structures with Mammalian Synthetic Biology

Ang Andy Tu
Thesis in the field of Biological Engineering: Recovery of T Cell Receptor Variable Sequences from 3′ Barcoded Single-Cell RNA Sequencing Libraries

Vaibhav Vasant Unhelkar
(February, 2020)
Thesis in the field of Autonomous Systems submitted to the Department of Aeronautics and Astronautics: Effective Information Sharing for Human-Robot Collaboration

Ali Vakilian
(September, 2019)
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: New Directions in Streaming Algorithms

Parker Denys Vascik
(February, 2020)
Thesis in the field of Aeronautics and Astronautics: Systems Analysis of Urban Air Mobility Operational Scaling

Deepak Vasisht
(September, 2019)
Thesis in the field of Computer Science and Engineering submitted to the Department of Electrical Engineering and Computer Science: Towards Realizing the Internet-of-Things Vision: In-body, Homes, and Farms

William R. Vega-Brown
(February, 2020)
Thesis in the field of Mechanical Engineering: Efficiency and Abstraction in Task and Motion Planning

Matthew T. Vernacchia
Thesis in the field of Space Propulsion submitted to the Department of Aeronautics and Astronautics: Development of Low-Thrust Solid Rocket Motors for Small, Fast Aircraft Propulsion

Lisa Rae Volpatti
(February, 2020)
Thesis in the field of Chemical Engineering: Development and Evaluation of Glucose-Responsive Biomaterials as Self-Regulated Insulin Delivery Systems

Sahag Voskian
(September, 2019)
Thesis in the field of Chemical Engineering: Electrochemically Mediated Separations and Catalysis

Andrea Kimi Wallace
Thesis in the field of Biological Engineering: Engineering Diatom Peptides for the Synthesis of Silica Nanomaterials

Michael P. Walsh
Thesis in the field of Electrical Engineering and Computer Science: Statistical Metrology and Process Control of Quantum Devices

Zhong Yi Wan
Thesis in the field of Mechanical Engineering and Computation submitted to the Department of Mechanical Engineering: Physics-Constrained Machine Learning Strategies for Turbulent Flows and Bubble Dynamics

Albert D. Wang
(September, 2019)
Thesis in the field of Mechanical Engineering: A Methodology to Quantify Risk of Failure for Dynamic Robots

Cheng Wang
(February, 2020)
Thesis in the field of Electrical Engineering and Computer Science: Terahertz Wave-Molecule Interactions via CMOS Chips: From Comb Gas Sensor with Absolute Specificity to Ultra-Stable, Miniaturized Clock

Fan Wang
(September, 2019)
Thesis in the field of Mechanical Engineering and Computation submitted to the Department of Mechanical Engineering: New Modeling of Compact, High-efficiency, and Widely-tunable Gas-phase Terahertz Lasers

Miao Wang
(February, 2020)
Thesis in the field of Chemical Engineering: Flue Gas CO_2 Capture Using Electrochemically Mediated Amine Regeneration

Zi Wang
(February, 2020)
Thesis in the field of Computer Science submitted to the Department of Electrical Engineering and Computer Science: Robot Learning with Strong Priors

Ziqiang Wang
(February, 2020)
Thesis in the field of Materials Science and Engineering: Lithium Deposition and Stripping in Solid-State Battery via Coble Creep

Samuel Walter Winslow
Thesis in the field of Chemical Engineering: Lead Sulfide Nanocrystal Ligand Structure and Its Influence on Superlattice Self-Assembly

Maxim Wolf
(September, 2019)
Thesis in the field of Computational and Systems Biology: Extracting Information on Coding Function from Signatures in Gene Sequence and Its Evolutionary History

Dan Wu
(February, 2020)
Thesis in the field of Mechanical Engineering and Computation submitted to the Department of Mechanical Engineering: Microfluidic and Electronic Detection of Protein Biomarkers

Jiajun Wu
(February, 2020)
Thesis in the field of Electrical Engineering and Computer Science: Learning to See the Physical World

Haofeng Xu
Thesis in the field of Aeronautics and Astronautics: Experiments in Electroaerodynamic Propulsion

Liangyu Xu
(February, 2020)
Thesis in the field of Mechanical Engineering and Computation submitted to the Department of Mechanical Engineering: A Second Generation URANS Approach for Application to Aerodynamic Design and Optimization in the Automotive Industry

Hongyu Yang
(September, 2019)
Thesis in the field of Electrical Engineering and Computer Science: New Interpretable Machine Learning Techniques and an Application to Stroke Prediction in Atrial Fibrillation Patients

Jing Yang
(February, 2020)
Thesis in the field of Materials Science and Engineering: Predictive Modeling of Electronic and Ionic Transport at Electrochemical Interfaces

Xi Yang
(September, 2019)
Thesis in the field of Electrical Engineering and Computer Science: Flash Analog-to-Digital Converters with Time-Based Techniques

Yi Yang
(September, 2019)
Thesis in the field of Electrical Engineering submitted to the Department of Electrical Engineering and Computer Science: Novel Electromagnetic Scattering Phenomena

Yujia Yang
(September, 2019)
Thesis in the field of Electrical Engineering submitted to the Department of Electrical Engineering and Computer Science: Nanostructures for Vacuum Optoelectronic Engineering

Han Yin
(February, 2020)
Thesis in the field of Mechanical Engineering: Mechanism and Applications of Large and Persistent Photoconductivity in Cadmium Sulfide

Chih-Chieh Yu
Thesis in the field of Biological Engineering: Expansion Microscopy of *C. elegans*: Nanoscale Imaging of Biomolecules Throughout an Entire Organism

Xiangming Yu
(September, 2019)
Thesis in the field of Mechanical Engineering and Computation submitted to the Department of Mechanical Engineering: Theoretical and Numerical Study of Air Entrainment and Bubble Size Distribution in Strong Free-surface Turbulent Flow at Large Froude and Weber Number

Rodger Yuan
(February, 2020)
Thesis in the field of Materials Science and Engineering: Manipulating Fluids and Fields in Multimaterial Fibers

Amy Xian Zhang
(September, 2019)
Thesis in the field of Electrical Engineering and Computer Science: Systems for Collective Human Curation of Online Discussion

Xiang Zhang
(September, 2019)
Thesis in the field of Mechanical Engineering: Non-Contact Ultrasound

Yun Zhang
(September, 2019)
Thesis in the field of Engineering Systems: Dynamic and Robust Network Resource Allocation

Yundi Zhang
(September, 2019)
Thesis in the field of Transportation submitted to the Department of Civil and Environmental Engineering: Real-time Personalized Toll Optimization Based on Traffic Predictions

Lin Zhao
(September, 2019)
Thesis in the field of Mechanical Engineering: Radiative Transport in Transparent Aerogels for Solar Thermal Energy Applications

Xiaoyu Zhao
(February, 2020)
Thesis in the field of Electrical Engineering and Computer Science: Learning Distributions of Transformations from Small Datasets for Applied Image Synthesis

Xingang Zhao
(September, 2019)
Thesis in the field of Nuclear Science and Engineering: Prediction of Departure from Nucleate Boiling in Subchannel Applications: from Mechanistic Modeling to Hybrid Framework

Xijia Zheng
Thesis in the field of Electrical Engineering and Computer Science: Cognitive Optical Network Architecture in Dynamic Environments

Jiawei Zhou
(September, 2019)
Thesis in the field of Mechanical Engineering: Nanoscale Thermal and Thermoelectric Energy Transport in Crystalline and Disordered Materials

Tianli Zhou
Thesis in the field of Transportation submitted to the Department of Civil and Environmental Engineering: Tackling Car-Sharing Service Design Problems at Scale with High-Resolution Data: Discrete Simulation-Based Optimization Approaches

Di Zhu
(September, 2019)
Thesis in the field of Electrical Engineering submitted to the Department of Electrical Engineering and Computer Science: Microwave Engineering in Superconducting Nanowires for Single-Photon Detection

Martín Zubeldía Suárez
(September, 2019)
Thesis in the field of Electrical Engineering submitted to the Department of Electrical Engineering and Computer Science: Delay, Stability, and Resource Tradeoffs in Large Distributed Service Systems

SCHOOL OF HUMANITIES, ARTS, AND SOCIAL SCIENCES, DOCTORAL

Doctor of Philosophy

School of Humanities, Arts, and Social Sciences

Anca-Patricia Anghel
Thesis in the field of Economics: Three Essays in Economics

Pablo Daniel Azar
(September, 2019)
Thesis in the field of Economics: Essays in Network Economics

Olivia Anna Kristina Bergman
Thesis in the field of Political Science: Designing Policy Feedback: Experimental Evidence on the Everyday Politics of the Social Contract

Elissa Matz Berwick
(September, 2019)
Thesis in the field of Political Science: Sub-state Nationalism and Social Solidarity: Essays on Spain and the United Kingdom

David Alan Builes
Thesis in the field of Philosophy submitted to the Department of Linguistics and Philosophy: The Empirical Relevance of Metaphysics

Ashawari Chaudhuri
(September, 2019)
Thesis in the field of History, Anthropology, and Science, Technology, and Society submitted to the Program in Science, Technology, and Society: The Kernel of Doubt: Agricultural Biotechnology, Braided Temporalities, and Agrarian Environments in India

María Loreto Cox Alcaíno
(September, 2019)
Thesis in the field of Political Science: Essays on Politics and Education

Elizabeth Ann Knudson Dekeyser
(September, 2019)
Thesis in the field of Political Science and Statistics submitted to the Department of Political Science: Bridging the Divide: Islam and the State in France

Mert Demirer
Thesis in the field of Economics and Statistics: Essays on Production Function Estimation

Ömer Demirok
(September, 2019)
Thesis in the field of Linguistics submitted to the Department of Linguistics and Philosophy: Scope Theory Revisited: Lessons from Pied-piping in *wh*-questions

Kevin Matthew Dorst
(September, 2019)
Thesis in the field of Philosophy submitted to the Department of Linguistics and Philosophy: Modest Epistemology

Naomi Clair Francis
(September, 2019)
Thesis in the field of Linguistics submitted to the Department of Linguistics and Philosophy: Presuppositions in Focus

Michael Raphael Freedman
(September, 2019)
Thesis in the field of Political Science: Sacred Politics: Religious Leaders and Conflict in Israel

Cosmo Douglas Grant
(September, 2019)
Thesis in the field of Philosophy submitted to the Department of Linguistics and Philosophy: Foundations and Philosophical Applications of Game Theory

Colin Travis Gray
(February, 2020)
Thesis in the field of Economics: Essays on Social Insurance Program Design

Jonathon Hazell
Thesis in the field of Economics: Essays on Empirical Macroeconomics

Ryan Reed Hill
Thesis in the field of Economics: Essays on the Economics of Science and Innovation

Nicholas Intscher
Thesis in the field of Political Science: The Fragmentation of Political Risk and MNCs' Supply Chain Linkages

Clare Seungyoon Kim
(September, 2019)
Thesis in the field of History, Anthropology, and Science, Technology, and Society submitted to the Program in Science, Technology, and Society: The Subjects of Modernism: Mathematics, Art, and the Politics of Value in Twentieth-Century United States

Alison Laurence
(September, 2019)
Thesis in the field of History, Anthropology, and Science, Technology, and Society submitted to the Program in Science, Technology, and Society: Afterlives of Extinction: The Politics of Display in the Modern United States

Jetson Leder-Luis
Thesis in the field of Economics: The Economics of Fraud and Corruption

Rose Elizabeth Lenehan
(September, 2019)
Thesis in the field of Philosophy submitted to the Department of Linguistics and Philosophy: Reparations, Racial Exploitation, and Racial Capitalism

Chen Lian
Thesis in the field of Economics: Essays on Behavioral Economics and Macroeconomics

Nicholas Steven Longenbaugh
(September, 2019)
Thesis in the field of Linguistics submitted to the Department of Linguistics and Philosophy: On Expletives and the Agreement/Movement Correlation

Philip Andrew Martin
(September, 2019)
Thesis in the field of Political Science: Insurgent Armies: Explaining Military Loyalty after Rebel Victory

Timothy Patrick McDonnell
(September, 2019)
Thesis in the field of Political Science: The Sources of US Nuclear Posture

Madeline Dabinett McKelway
Thesis in the field of Economics: Essays on the Empowerment and Employment of Women in India

Andrew Charles Miller
Thesis in the field of Political Science: The Information Game: Police-Citizen Cooperation in Communities with Criminal Groups

Juan Mateo Montenegro Zarama
Thesis in the field of Economics: Essays on the Political Economy of Development

Sophie Moracchini
(September, 2019)
Thesis in the field of Linguistics submitted to the Department of Linguistics and Philosophy: Morphosyntax and Semantics of Degree Constructions

Yaroslav Vadimovich Mukhin
(September, 2019)
Thesis in the field of Economics and Statistics: Geometric Methods in Econometrics and Statistics

Lucas Melvin Müller
(September, 2019)
Thesis in the field of History, Anthropology, and Science, Technology, and Society submitted to the Program in Science, Technology, and Society: Toxic Relationships: Health and the Politics of Science and Trade in the Postcolonial World

Cullen Gifford Nutt
(September, 2019)
Thesis in the field of Political Science: Sooner is Better: Covert Action to Prevent Realignment

Tamar Judith Oostrom
Thesis in the field of Economics: Essays on Innovation in Health Care Markets

Peter Gibbs Oviatt
(September, 2019)
Thesis in the field of History, Anthropology, and Science, Technology, and Society submitted to the Program in Science, Technology, and Society: Truffle Crops and Soil Drugs: New Fungal Practices and Epistemologies for the 21st Century

Gustavo Passarelli Giroud Joaquim
Thesis in the field of Economics: Essays in Bank Competition and Credit Policy

Jonathan Blake Petkun
Thesis in the field of Economics: Essays on the Law and Economics of Public Institutions

Milo Phillips-Brown
(September, 2019)
Thesis in the field of Philosophy submitted to the Department of Linguistics and Philosophy: What it Means to Want

Ignacio Puente
Thesis in the field of Political Science: Incubating (Financial) Development: Private Equity in Latin America

William Minot Rafey
Thesis in the field of Economics: Essays in Environmental Market Design

Tesalia Elisa Rizzo Reyes
(February, 2020)
Thesis in the field of Political Science: Intermediaries of the State: Bureaucratic Transaction Costs of Claiming Welfare in Mexico

Beth Michelle Semel
(September, 2019)
Thesis in the field of History, Anthropology, and Science, Technology, and Society submitted to the Program in Science, Technology, and Society: Speech, Signal, Symptom: Machine Listening and the Remaking of Psychiatric Assessment

Cory B. Smith
Thesis in the field of Economics: Land Use and Development Over the Long Run

Mariano Eduardo Spector
Thesis in the field of Economics: Essays on Redistributive Fiscal Policies and Macroeconomics

Guillermo Toral Martínez
Thesis in the field of Political Science: The Political Logics of Patronage: Uses and Abuses of Government Jobs in Brazil

Clara Vandeweerdt
Thesis in the field of Political Science: Identities and Issue Opinions: Learning from Climate Change

Patrick Quinn White
(September, 2019)
Thesis in the field of Philosophy submitted to the Department of Linguistics and Philosophy: Love First

Nathan Gaspar Zorzi
Thesis in the field of Economics: Essays on Uninsured Income Risk, Lumpy Investment and Aggregate Demand

SLOAN SCHOOL OF MANAGEMENT, DOCTORAL

Doctor of Philosophy

Sloan School of Management

Inna Abramova
Thesis in the field of Management: Labor Constraints and Accounting Firm Mergers

Michael Francis Beeler
(September, 2019)
Thesis in the field of Operations Research: Inference and Decision Models for Regulatory and Business Challenges in Low-Income Countries

Lauren Elizabeth Berk
Thesis in the field of Operations Research: New Optimization Approaches to Matrix Factorization Problems with Connections to Natural Language Processing

Max Ray Biggs
(September, 2019)
Thesis in the field of Operations Research: Prescriptive Analytics in Operations Problems: A Tree Ensemble Approach

Brittany Marie Bond
Thesis in the field of Management: Status Recognition and its Consequences for Top-Talent Mobility and Productivity

Louis Lester Chen
(September, 2019)
Thesis in the field of Operations Research: Distributionally Robust Optimization with Marginals: Theory and Applications

Avinash Collis
Thesis in the field of Management: How Should We Measure the Digital Economy?

Valère Renaud Ernst Fourel
(February, 2020)
Thesis in the field of Management: Essays in Empirical Finance

Caroline Viola Fry
Thesis in the field of Management: The Very Invisible College: Global Science and African Participation

Julia Gaudio
Thesis in the field of Operations Research: Investigations in Applied Probability and High-Dimensional Statistics

William W. Goulding
(September, 2019)
Thesis in the field of Management: Essays in Financial Economics

Rim Hariss
(September, 2019)
Thesis in the field of Operations Research: Data-driven Optimization with Behavioral Considerations: Applications to Pricing

Michael Hu
(February, 2020)
Thesis in the field of Operations Research: Leveraging Data Analytics to Improve Outpatient Healthcare Operations

David Scott Hunter
(February, 2020)
Thesis in the field of Operations Research: New Approaches to Maximizing Influence in Large-Scale Social Networks

Michael Joseph Kearney
(September, 2019)
Thesis in the field of Management: Essays on Managing Innovation

J. Daniel Kim
(February, 2020)
Thesis in the field of Management: Entrepreneurial Organizations and Human Capital

Fangzhou Lu
Thesis in the field of Management: Essays in Financial Economics

Jing Lu
(February, 2020)
Thesis in the field of Operations Research: Probabilistic Models and Optimization Algorithms for Large-scale Transportation Problems

Maarten Meeuwis
Thesis in the field of Management: Essays in Financial Economics

Milashini Nambiar
(September, 2019)
Thesis in the field of Operations Research: Data-driven Pricing and Inventory Management with Applications in Fashion Retail

Suzie Noh
Thesis in the field of Management: The Effect of Financial Reporting on Strategic Investments: Evidence from Purchase Obligations

Jean Pauphilet
Thesis in the field of Operations Research: Algorithmic Advancements in Discrete Optimization - Applications to Machine Learning and Healthcare Operations

William Powley
(February, 2020)
Thesis in the field of Management: Other Litigation: A New Measure of Ex Ante Litigation Risk

James Whitcomb Riley
Thesis in the field of Management: Social Exchange and Valuations in the Market for Contemporary Art

Bradley Eli Sturt
Thesis in the field of Operations Research: Dynamic Optimization in the Age of Big Data

Jesse Michael Wahlen
Thesis in the field of Management: Essays on the Evaluation of Novel Ideas

Yuchen Wang
Thesis in the field of Operations Research: Interpretable Machine Learning Methods with Applications to Health Care

Julia Yun Chien Yan
Thesis in the field of Operations Research: From Data to Decisions in Urban Transit and Logistics

Duanyi Yang
Thesis in the field of Management: Essays on Workplace Practices in Different Institutional Settings

Ilias Zadik
(September, 2019)
Thesis in the field of Operations Research: Computational and Statistical Challenges in High Dimensional Statistical Models

SCHOOL OF SCIENCE, DOCTORAL

Doctor of Science

School of Science

Spencer Nicholas Gaelan Axani
(February, 2020)
Thesis in the field of Physics: Sterile Neutrino Searches at the IceCube Neutrino Observatory

Doctor of Philosophy

School of Science

Clare Isabel Abreu
Thesis in the field of Physics: Environmental Modulation of Microbial Communities

Danielle Aduke Adekunle
Thesis in the field of Biology: Transcriptome-Wide Organization of Subcellular Microenvironments Revealed by ATLAS-Seq

Andrew Jeehyun Ahn
Thesis in the field of Mathematics: The Method of Moments in Convolved Random Matrix Models and Discrete Analogues

Mohammad Murshid Alam
(February, 2020)
Thesis in the field of Chemistry submitted to the Department of Chemistry: Immune Modulation by Synthetic Multivalent Antigens

Nicole Ann Aponte Santiago
Thesis in the field of Biology: Functional Changes in Connectivity Induced by Differential Manipulations of Activity in Drosophila Tonic Versus Phasic Motoneurons

Vishal Arul
Thesis in the field of Mathematics: Explicit Division and Torsion Points on Superelliptic Curves and Jacobians

Emir Enrique Aviles Pagan
Thesis in the field of Developmental Biology submitted to the Department of Biology: Regulators of the Drosophila Oocyte-to-Embryo Transition

Timothy James Barnum
(February, 2020)
Thesis in the field of Chemistry submitted to the Department of Chemistry: Spectroscopy and Dynamics of High Orbital Angular Momentum Rydberg States

Samuel Garrett Bartko
(September, 2019)
Thesis in the field of Chemistry submitted to the Department of Chemistry: Synthesis of Pyridines and Azaindoles via Diels-Alder Reactions of Tosyl Cyanide with Vinyl- and Heteroarylallenes

Tristan Andrew Bell
(February, 2020)
Thesis in the field of Biology: Intersubunit Communication and Coordinated Mechanical Activity in the AAA+ Protease ClpXP

John Brooks Biersteker
(September, 2019)
Thesis in the field of Planetary Sciences submitted to the Department of Earth, Atmospheric, and Planetary Sciences: Planet Formation and Evolution in our Solar System and Beyond

Pablo Boixeda Alvarez
Thesis in the field of Mathematics: Affine Springer Fibers and the Representation Theory of Small Quantum Groups and Related Algebras

Djenet Bousbaine
(February, 2020)
Thesis in the field of Microbiology submitted to the Department of Biology: Commensal-Specific Immune Responses At The Intestinal Mucosa

Stephanie Akemi Brandt
Thesis in the field of Physics: Measurement of W and Z Boson Production Cross Sections in Proton-Proton Collisions at $\sqrt{s}$=5.02 TeV and $\sqrt{s}$=13 TeV

Christopher M. Brennan
(September, 2019)
Thesis in the field of Biology: Aneuploidy Reveals Insights into Control of Protein Complex Stoichiometry

Sarah Jean Bricault
(February, 2020)
Thesis in the field of Neurobiology submitted to the Department of Biology: Investigating Brain-wide Neural Mechanisms Using fMRI and Novel Tools

Daniel Briskin
(February, 2020)
Thesis in the field of Molecular Biology submitted to the Department of Biology: The Biochemical Basis for the Cooperative Action of MicroRNAs

Aaron William Buikema
(February, 2020)
Thesis in the field of Physics: High-Power Operation of Interferometric Gravitational-Wave Detectors

Robert Hood Chatham IV
Thesis in the field of Mathematics: An Orientation Map for Height p-1 Real E Theory

Atticus Ballman Christensen
Thesis in the field of Mathematics: A Topology on Points on Stacks

Nathaniel David Chu
(September, 2019)
Thesis in the field of Microbiology submitted to the Department of Biology: Translating Dynamics of Human-microbe Interactions

Jennifer K. Cloutier
Thesis in the field of Developmental Biology submitted to the Department of Biology: Activin Signaling Controls a Wound-Induced Program Essential for Regenerative Patterning

Steven Eli Cohen
Thesis in the field of Chemistry submitted to the Department of Chemistry: Multienzyme Assemblies and Dynamics in Acetogenesis and Methanogenesis

Max Collinet
(February, 2020)
Thesis in the field of Geology submitted to the Department of Earth, Atmospheric, and Planetary Sciences: Experimental and Analytical Studies of Partial Melting in Planetesimals and the Martian Mantle

Julian Colton Cooper
(September, 2019)
Thesis in the field of Chemistry submitted to the Department of Chemistry: Novel Metal- and Main Group-Catalyzed Methods for Modulating Molecular Oxygenation

Miles Meissner Paasikivi Couchman
Thesis in the field of Mathematics: The Stability of Bound States in Pilot-Wave Hydrodynamics

Ian Thomas Hunt Counts
Thesis in the field of Physics: Surface Friction and Spectroscopic Probes of New Physics with Trapped Ions

Reynier Cruz Torres
Thesis in the field of Physics: Two-Nucleon Short-Range Correlations in Light Nuclei

Peter Holmes Culviner
(September, 2019)
Thesis in the field of Computational and Systems Biology submitted to the Department of Biology: Endoribonuclease Toxin-antitoxin Systems in Bacteria: Targets and Growth Inhibition

Zhehao Dai
Thesis in the field of Physics: Exploring Strongly Interacting Gapless States: Cuprates, Pair Density Waves, and Fluctuating Superconductivity

Simona Dalin
(February, 2020)
Thesis in the field of Biology: Cell-Intrinsic and Cell-Extrinsic Resistance to Classical Chemotherapies

Kathleen Patricia Davis
(September, 2019)
Thesis in the field of Biology: Specificity and Benefits of an Exclusion Mechanism for a Mobile Genetic Element in *Bacillus subtilis*

Christopher Daniel Dawson
Thesis in the field of Biology: Structural Characterization of Glycyl Radical Enzymes in the Human Gut Microbiome

Nicholas Andrew DeLateur
(September, 2019)
Thesis in the field of Chemistry submitted to the Department of Chemistry: Engineering LuxR-type Quorum Sensing Proteins for New Functions

Joseph Michael Dennis, Jr.
(February, 2020)
Thesis in the field of Chemistry submitted to the Department of Chemistry: Palladium- and Nickel-Catalyzed C–N Cross-Coupling Reactions Featuring Soluble Organic Bases

Ivana Ljubomirova Dimitrova
(February, 2020)
Thesis in the field of Physics: Realizing Quantum Spin Models with Li 7 Atoms in an Optical Lattice

Amro Hani Ali Dodin
Thesis in the field of Chemistry submitted to the Department of Chemistry: Transport and Fluctuations at the Nanoscale

Natalia C. Drosu
(February, 2020)
Thesis in the field of Biology: Understanding the Mechanism of Anti-Retroviral Nucleoside Analogs as Inhibitors of Epstein-Barr Virus Lytic DNA Replication

Yiheng Duan
(February, 2020)
Thesis in the field of Physics: Enhanced Light-Atom Interaction in an Optical Resonator

Ryan Andrew Duncan
Thesis in the field of Chemistry submitted to the Department of Chemistry: Mechanical Properties of Complex Solids and Exotic Thermal Transport Dynamics Investigated with Optical and Extreme-Ultraviolet Transient Grating Techniques

Kaitlyn Anne Dwelle
Thesis in the field of Chemistry submitted to the Department of Chemistry: Understanding Electrochemistry at the Molecular Scale: Molecular Dynamics Methods and Applications

Timothy Jonas Eisen
Thesis in the field of Biology: Form and Function of Poly(A) Tails

Matthew Ryan Elkins
(February, 2020)
Thesis in the field of Chemistry submitted to the Department of Chemistry: Protein-Ligand Binding by Solid-State NMR: Cholesterol Interactions in Membranes and with the Influenza A M2 Protein

Trevor John Erickson
Thesis in the field of Chemistry submitted to the Department of Chemistry: Laser Spectroscopy of Acetylene

Martin Jin-teng Falk
(February, 2020)
Thesis in the field of Physics: Self-Assembly of Biological Heteropolymers

Manuel A. Florez Torres
(September, 2019)
Thesis in the field of Geophysics submitted to the Department of Earth, Atmospheric, and Planetary Sciences: A Global Study of Double Seismic Zones and Its Implications for the Mechanism of Intermediate-Depth Earthquakes

Caitlin Marie Niesen Friend
Thesis in the field of Molecular Biology submitted to the Department of Biology: The Roles of the Helicase Double-Hexamer Complex and the SSB Protein RPA during Eukaryotic DNA Replication

Michael Baily Geeson
Thesis in the field of Chemistry submitted to the Department of Chemistry: New Reactions and Reagents for Phosphorus-Carbon Bond-Formation

Alex S. Genshaft
Thesis in the field of Chemistry submitted to the Department of Chemistry: Methods to Interrogate Cells and Their Interactions with Single-Cell Resolution

Matthew Aaron Getz
(September, 2019)
Thesis in the field of Biology: Characterization of the Roles of Xrn1p in Small-RNA–Mediated Gene-Silencing Pathways

Alexander Kamitsuka Godfrey
Thesis in the field of Genetics submitted to the Department of Biology: A Quantitative View of Y-Chromosome Gene Expression across the Human Body

David C. Goldfinger
(February, 2020)
Thesis in the field of Physics: X-ray Searches for Decaying Sterile Neutrinos with the Micro-X and XQC Sounding Rockets

Eva Marie Golos
Thesis in the field of Geophysics submitted to the Department of Earth, Atmospheric, and Planetary Sciences: Imaging and Interpreting Seismic Heterogeneity in the North American Lithosphere

Allena Mistral Goren
(September, 2019)
Thesis in the field of Chemistry submitted to the Department of Chemistry: Structural and Functional Studies of Heme Binding Proteins Toward the Understanding of Malaria

Ricardo Grande Izquierdo
Thesis in the field of Mathematics: The Role of Smoothing Effect in Some Dispersive Equations

Michael William Gribble, Jr.
Thesis in the field of Chemistry submitted to the Department of Chemistry: New Fundamental Transformations of Heterocyclic Compounds Enabled by Copper Catalysis

Xueying Guo
(February, 2020)
Thesis in the field of Physics: Statistical Analyses of Exoplanetary Systems and Individual Studies of the Atmospheres of Two Sub-Neptune-Sized Planets

Mukund Gupta
Thesis in the field of Climate Science submitted to the Department of Earth, Atmospheric, and Planetary Sciences: Climate System Response to Perturbations: Role of Ocean and Sea Ice

Eric Calvin Hansen
(February, 2020)
Thesis in the field of Chemistry submitted to the Department of Chemistry: Low-Toxicity, Earth-Abundant Nanomaterials for Photoluminescence or Magnetic Resonance

Renin Hazan
Thesis in the field of Biology: Investigating the Cytoplasmic Role of E2F4 in Multiciliogenesis

Campbell Lucas Hewett
Thesis in the field of Mathematics: Computability of Rational Points on Curves over Function Fields in Characteristic p

Dylan George Hsu
(September, 2019)
Thesis in the field of Physics: **Precision Measurements of and Search for Dark Matter in the Transverse Momentum Spectra of Z Bosons

Yu-Chien Huang
(September, 2019)
Thesis in the field of Physics: Elliptic Fibrations among Toric Hypersurface Calabi-Yau and Mirror Symmetry of Fibrations

Ethan Yale Jaffe
Thesis in the field of Mathematics: Asymptotic Description of the Formation of Black Holes from Short-Pulse Data

Vishesh Jain
Thesis in the field of Mathematics: Quantitative Invertibility of Random Matrices: a Combinatorial Perspective

Cassie Marie Jarvis
(February, 2020)
Thesis in the field of Chemistry submitted to the Department of Chemistry: Polymeric Antigens as Targeted Probes of Immunity

Li Jing
(February, 2020)
Thesis in the field of Physics: Physical Symmetry Enhanced Neural Networks

Joshua Mark Jones
Thesis in the field of Microbiology submitted to the Department of Biology: Effects of the Mobile Genetic Element ICEBs1 on Bacterial Host Fitness

Rohan Jonnalagadda
Thesis in the field of Biochemistry submitted to the Department of Biology: Structural and Functional Investigations of Mechanisms of Iron-Utilizing Enzymes

Yoon Jung
Thesis in the field of Physics: Inferring System Properties from Thermodynamic Fluctuations: A Tool Development Approach

Alexander Mark Justen
(February, 2020)
Thesis in the field of Chemistry submitted to the Department of Chemistry: Galactofuranose in Mycobacteria and Nematodes

Borys Kadets
Thesis in the field of Mathematics: Arboreal Representations, Sectional Monodromy Groups, and Abelian Varieties over Finite Fields

Gyunghoon Kang
(September, 2019)
Thesis in the field of Chemistry submitted to the Department of Chemistry: Structural Investigations of Class Ia Ribonucleotide Reductases by Electron Microscopy

Samuel Weisgurt Kazer
Thesis in the field of Chemistry submitted to the Department of Chemistry: Transcribing the Dynamic Multicellular Immune Orchestra during Acute HIV Infection

Rebecca Soyoung Kim
Thesis in the field of Chemistry submitted to the Department of Chemistry: Methane Mono-Oxidation Electrocatalysis by Palladium and Platinum Salts

Clint Shijun Ko
(February, 2020)
Thesis in the field of Biology: The Spatial Organization of the Microtubule Cytoskeleton and Cell Divisions Promotes Tissue Morphogenesis

Vladyslav Kozii
(September, 2019)
Thesis in the field of Physics: Exotic Superconductivity in Quantum Materials

Dmitrii Kubrak
Thesis in the field of Mathematics: Cohomologically Proper Stacks over Z_p: Algebra, Geometry and Representation Theory

Jean-Benoît Lalanne
Thesis in the field of Physics: Multiscale Dissection of Bacterial Proteome Optimization

Christopher Albert Leppla
(September, 2019)
Thesis in the field of Neuroscience submitted to the Department of Brain and Cognitive Sciences: Associative Learning in Auditory Thalamus and Amygdala

Amir Levy
(February, 2020)
Thesis in the field of Physics: Beyond Poisson-Boltzmann: Strong Correlations and Extreme Confinement in Ionic Fluids

Cyprian Krzysztof Lewandowski
Thesis in the field of Physics: Dynamic Polarizability and Collective Modes in Narrow-Band Electron Systems

Zhenkun Li
Thesis in the field of Mathematics: Contributions to Sutured Monopole and Sutured Instanton Floer Homology Theories

Megan Jeramaz Lickley
Thesis in the field of Climate Science submitted to the Department of Earth, Atmospheric, and Planetary Sciences: Quantifying Uncertainties and Trends in the Climate Change Trajectory

Richard Yifan Liu
(September, 2019)
Thesis in the field of Chemistry submitted to the Department of Chemistry: Organic Reactions Catalyzed by Copper(I) Hydride Complexes

William David Lunden
(February, 2020)
Thesis in the field of Physics: Development of a New Dy Quantum Gas Experiment

Galen Forest Lynch
(February, 2020)
Thesis in the field of Neuroscience submitted to the Department of Brain and Cognitive Sciences: The Distinct Neural Mechanisms Underlying the Production of Stereotyped and Exploratory Vocal Behavior in Songbirds

Tzuhsuan Ma
(February, 2020)
Thesis in the field of Neuroscience submitted to the Department of Brain and Cognitive Sciences: Towards a Theory for the Emergence of Grid and Place Cell Codes

Svetlana Makarova
Thesis in the field of Mathematics: Strange Duality on Elliptic and K3 Surfaces

Jonathan Matthew Malmaud
(February, 2020)
Thesis in the field of Cognitive Science submitted to the Department of Brain and Cognitive Sciences: Enriching Models of Natural Language with Auxiliary Data

John Colonnese Manteiga
(February, 2020)
Thesis in the field of Biology: Enhancers and Phase Separation in the Control of Gene Expression

Lucas David Mason-Brown
Thesis in the field of Mathematics: Unipotent Representations of Real Reductive Groups

Jared Thomas Mattos
(September, 2019)
Thesis in the field of Chemistry submitted to the Department of Chemistry: Advancements in the Synthesis of Distorted Tricoordinate Phosphorus Compounds and Their Use as Platforms in Reductive Chemistries.

Gina Danielle Mawla
Thesis in the field of Biology: Functions of Alternative ClpP Subunits in Pseudomonas Aeruginosa

Conor James McClune
(September, 2019)
Thesis in the field of Computational and Systems Biology submitted to the Department of Biology: Engineering Orthogonal Signaling Pathways to Probe Sequence Space Capacity

Christopher Francis McGinn
(September, 2019)
Thesis in the field of Physics: Mapping the Redistribution of Jet Energy in PbPb Collisions at the LHC with CMS

Gweneth Anne McKinley
Thesis in the field of Mathematics: Probabilistic and Extremal Behavior in Graphs and Matrices

Pearson Whitehead Miller
Thesis in the field of Physics: Pattern Formation on Active Chemo-Mechanical Surfaces

Nicole Susanne Moody
Thesis in the field of Chemistry submitted to the Department of Chemistry: Assessing and Improving the Regulatory Compliance and End-of-Life Environmental Impacts of Lead-Based Thin-Film Photovoltaics

Kelsey R. Moore
Thesis in the field of Geobiology submitted to the Department of Earth, Atmospheric and Planetary Sciences: Cyanobacterial Evolution and Interactions with the Proterozoic World

Isaak Elis Müller
Thesis in the field of Microbiology submitted to the Department of Biology: Engineering Probiotic Microbes for In Vivo Applications

Marvin Eduarte Nayan
(February, 2020)
Thesis in the field of Neurobiology submitted to the Department of Biology: Local Regulation of Experience-Dependent Synaptic Plasticity by the Noncoding Exonic Circular RNA circHomer1

Jennifer Kim Thu Nguyen
(February, 2020)
Thesis in the field of Microbiology submitted to the Department of Biology: Rapid Nutrient Fluctuations and Their Implications for Bacterial Growth

Thao Huong Nguyen
(September, 2019)
Thesis in the field of Biology: Alternatively Spliced Isoforms of Fibronectin, Tenascin-R and Other Potential Players in Early Vasculogenesis

Sarah Ann Nordeen
Thesis in the field of Biophysical Chemistry and Molecular Structure submitted to the Department of Biology: A Nanobody Suite for Yeast Scaffold Nucleoporins Provides Details of the Y Complex Structure and Nuclear Pore Complex Assembly

Trevor Vincent Nykaza
(February, 2020)
Thesis in the field of Chemistry submitted to the Department of Chemistry: Reductive Transformations of Nitroarenes Catalyzed by P(III)/P(V)=O Redox Cycling

Chase Robert Olsson
Thesis in the field of Chemistry submitted to the Department of Chemistry: Synthesis of Complex Epipolythiodiketopiperazine Alkaloids for Mechanistic Studies

Tudor Gabriel Padurariu
Thesis in the field of Mathematics: K-theoretic Hall Algebras for Quivers with Potential

Louis John Papa III
(February, 2020)
Thesis in the field of Chemistry submitted to the Department of Chemistry: New Strategies for *In Vivo* Continuous Directed Evolution

Jaeseok Park
(September, 2019)
Thesis in the field of Neurobiology submitted to the Department of Biology: Genetic Analysis of cGMP-Dependent Chemosensory Signal Transduction Pathways in the Detection of Bacterial Metabolites by C. elegans

Jiewon Park
Thesis in the field of Mathematics: Convergence of Complete Ricci-flat Manifolds

Joshua William Pfeffer
Thesis in the field of Mathematics: Frontiers of Liouville Quantum Gravity

Pyae Phyo
Thesis in the field of Chemistry submitted to the Department of Chemistry: Solid-state Nuclear Magnetic Resonance Investigations of Complex Plant Biomaterials: Plant Cell Walls and Pine Sporopollenin

Sanjay M. Prakadan
(February, 2020)
Thesis in the field of Chemistry submitted to the Department of Chemistry: Single-Cell Methods for Profiling Tumor & Microenvironment Responses to Therapeutic Challenges

Mónica Cristina Quiñones-Frías
Thesis in the field of Biology: Characterization of Synaptotagmin 7 Function in Neurotransmission and its Subcellular Localization at Synapses

Amelie A. Raz
Thesis in the field of Biology: Choices in Regeneration: Position and Fate

Michael Douglas Reed
(February, 2020)
Thesis in the field of Neuroscience submitted to the Department of Brain and Cognitive Sciences: The Role of IL-17a in the Rescue of ASD-like Behavioral Phenotypes Following Immune Stimulation in a Mouse Model of Neurodevelopmental Disorders

Christopher E. R. Richardson
(September, 2019)
Thesis in the field of Chemistry submitted to the Department of Chemistry: Approaches to Study Zn(II) Deficiency and Transport in Biology

Nathan Darrell Peterson Ricke
(September, 2019)
Thesis in the field of Chemistry submitted to the Department of Chemistry: Development of Electronic Structure and Kinetics Methods for the Rational Design of Electrocatalysts

Mary Grace Russell
(September, 2019)
Thesis in the field of Chemistry submitted to the Department of Chemistry: Expansion of the Technology and Techniques of Continuous Flow Synthesis

Christopher Jonathan Ryba
Thesis in the field of Mathematics: Stable Characters for Symmetric Groups and Wreath Products

Steven Robert Sando
(February, 2020)
Thesis in the field of Neurobiology submitted to the Department of Biology: Molecular, Cellular, and Circuit Analysis of *C. elegans* Spitting Behavior

Emma Louise Sedivy
Thesis in the field of Biology: Regulation of DnaA as a transcription factor by modulation of cooperative binding, and by arrA, an antisense RNA

Hyowon Seo
(September, 2019)
Thesis in the field of Chemistry submitted to the Department of Chemistry: Photoredox Activation of Carbon Dioxide and Unactivated Aliphatic Carbonyl Compounds

Huitao Shen
Thesis in the field of Physics: Nonstandard Approaches to Electronic Responses in Solids

Ryan Spencer Shinabery
(September, 2019)
Thesis in the field of Chemistry submitted to the Department of Chemistry: Palladium Catalyzed Cross-Coupling of Esters and Amides

Oles Shtanko
(September, 2019)
Thesis in the field of Physics: Boundaries, Disorder and Noise in Quantum-Coherent Systems

Boris Shteynas
(September, 2019)
Thesis in the field of Physics: Spin-Orbit Coupled Bose Gases

Katherine Emily Shulenberger
(September, 2019)
Thesis in the field of Chemistry submitted to the Department of Chemistry: Confinement Effects on Multiexciton Dynamics in Semiconductor Nanocrystals

Yuelin Song
Thesis in the field of Molecular Biology submitted to the Department of Biology: Dynamic Regulation and Functions of Locus-Specific DNA Methylation

Amanda Walcott Stubbs
(September, 2019)
Thesis in the field of Chemistry submitted to the Department of Chemistry: Oxygen Atom Transfer with Manganese–Exchanged Metal–Organic Frameworks

Yang Su
Thesis in the field of Biology: The Mitochondria Activates Macrophage Anabolic Responses Through Respiratory Chain Disassembly

Ao Sun
Thesis in the field of Mathematics: Singular Behaviour and Long Time Behaviour of Mean Curvature Flow

Chen Sun
Thesis in the field of Neuroscience submitted to the Department of Brain and Cognitive Sciences: How Hippocampus Uses Discrete Neural Codes to Represent Space and Time

Xiaochen Sun
Thesis in the field of Neuroscience submitted to the Department of Brain and Cognitive Sciences: Identifying Functionally Distinct Neuronal Ensembles within the Memory Engram

Zenna Tavares
(February, 2020)
Thesis in the field of Cognitive Science and Statistics submitted to the Department of Brain and Cognitive Sciences: Imaginative Reasoning in Probabilistic Programs

Ashley Lynn Tong
(September, 2019)
Thesis in the field of Chemistry submitted to the Department of Chemistry: A Comparative Look at Structure-Function Roles in Energy Transfer Dynamics of Light-Harvesting Complexes in Purple Bacteria

Brandon Vanhuy Tran
Thesis in the field of Mathematics: Building and Using Robust Representations in Image Classification

Suan Lian Tuang
(February, 2020)
Thesis in the field of Chemistry submitted to the Department of Chemistry: Development of a Reactive Peptide Sequence for Site-Selective Bioconjugations

Sam Edward Turton
Thesis in the field of Mathematics: Theoretical Modeling of Pilot-Wave Hydrodynamics

Marc Havens Wadsworth II
Thesis in the field of Chemistry submitted to the Department of Chemistry: From Benchtop to Bedside and Beyond: The Development and Application of Low- and High-Throughput, Single-Cell RNA-Seq Platforms for Precision Medicine Pipelines

Benjamin Waldman
Thesis in the field of Microbiology submitted to the Department of Biology: Identification of a Master Regulator of Differentiation in *Toxoplasma gondii*

Jake Lee Wellens
Thesis in the field of Mathematics: Assorted Results in Boolean Function Complexity, Uniform Sampling and Clique Partitions of Graphs

Spencer Sai Git Wong
(September, 2019)
Thesis in the field of Molecular Biology submitted to the Department of Biology: Genetic and Metabolomic Analysis of how Population Density Modulates Neuroendocrine Physiology of C. elegans

Tailin Wu
(February, 2020)
Thesis in the field of Physics: Intelligence, Physics and Information - the Tradeoff Between Accuracy and Simplicity in Machine Learning

Lilia Shell Xie
Thesis in the field of Chemistry submitted to the Department of Chemistry: Through-Bond and Through-Space Charge Transport in Metal-Organic Frameworks

Haoran Xu
Thesis in the field of Physics: Experimental Studies of Internal Dark Currents in High Gradient Accelerator Structures at 17 GHz

Zoe Ziyue Yan
Thesis in the field of Physics: From Strongly Interacting Bose-Fermi Mixtures to Ultracold Dipolar Molecules

Hong-Zhou Ye
Thesis in the field of Chemistry submitted to the Department of Chemistry: Methods For The Electronic Structure Of Large Chemical Systems

Jason Jungwan Yoo
Thesis in the field of Chemistry submitted to the Department of Chemistry: Developing Highly Efficient Lead Halide Perovskite Solar Cells

Xiaoqian Yu
(September, 2019)
Thesis in the field of Computational and Systems Biology submitted to the Department of Biology: The Assembly and Functions of Microbial Communities on Complex Substrates

Allen Lambert Yuan
Thesis in the field of Mathematics: On the Higher Frobenius

Guangyi Yue
Thesis in the field of Mathematics: Combinatorics of Affine Springer Fibers and Combinatorial Wall-Crossing

Alicia Viridiana Zamudio Montes de Oca
(February, 2020)
Thesis in the field of Biology: Insights into Gene Regulation by Genome Structure, Phase Separation and Developmental Signaling

Hong Zhang
(February, 2020)
Thesis in the field of Chemistry submitted to the Department of Chemistry: Palladium-Catalyzed Carbon–Oxygen Bond Formation

Xiangyu Zhang
Thesis in the field of Neuroscience submitted to the Department of Brain and Cognitive Sciences: Valence Encoding and Memory in the Amygdala

Yahui Zhang
(September, 2019)
Thesis in the field of Physics: Bridging Hubbard Model Physics and Quantum Hall Physics in Graphene Moire Superlattices

Julia Zhao
Thesis in the field of Chemistry submitted to the Department of Chemistry: Design and Application of Polymer Metal-Organic Cage Gels

Tingtao Zhou
(September, 2019)
Thesis in the field of Physics: Phase Transition Induced Deformation in Porous Media

AWARDED JOINTLY WITH THE WOODS HOLE OCEANOGRAPHIC INSTITUTION, DOCTORAL

Doctor of Philosophy

James Francis Bramante
(February, 2020)
Thesis in the field of Marine Geology submitted to the Department of Earth, Atmospheric, and Planetary Sciences: Wave-Driven Geomorphology of Pacific Carbonate Coastlines: From Landscape to Wavelength Scale

Katherine Amelia Castagno
(September, 2019)
Thesis in the field of Marine Geology submitted to the Department of Earth, Atmospheric, and Planetary Sciences: Storm Signatures in Coastal Ponds and Marshes over the Late Holocene

Christine Yifeng Chen
(February, 2020)
Thesis in the field of Geology submitted to the Department of Earth, Atmospheric, and Planetary Sciences: U-Th Dating of Lacustrine Carbonates

William Bryce Corlett
(September, 2019)
Thesis in the field of Physical Oceanography submitted to the Department of Earth, Atmospheric, and Planetary Sciences: Dynamics and Kinematics of an Estuarine Network

Noelle Adriana Held
(February, 2020)
Thesis in the field of Chemical Oceanography and Microbial Biogeochemistry submitted to the Department of Earth, Atmospheric, and Planetary Sciences: Protein Regulation in Trichodesmium and Other Marine Bacteria: Observational and Interpretive Biomarkers of Biogeochemical Processes

Julie Kathryn Jakoboski
(September, 2019)
Thesis in the field of Physical Oceanography submitted to the Department of Earth, Atmospheric, and Planetary Sciences: Equatorial Ocean Dynamics Impacting Upwelling West of Galápagos Archipelago

Meghan R. Jones
(September, 2019)
Geological Oceanography: Geophysical and Geochemical Constraints on Submarine Volcanic Processes

Bryan Edward Kaiser
(February, 2020)
Thesis in the field of Physical Oceanography submitted to the Department of Earth, Atmospheric, and Planetary Sciences: Finescale Abyssal Turbulence: Sources and Modeling

Christopher William Kinsley
(September, 2019)
Thesis in the field of Geochemistry submitted to the Department of Earth, Atmospheric, and Planetary Sciences: Reconstructing Atmospheric Changes in Monsoon Regions Using Eolian Dust

Hannah Friendly Mark
(September, 2019)
Thesis in the field of Marine Geophysics submitted to the Department of Earth, Atmospheric, and Planetary Sciences: Seismic and Numerical Constraints on the Formation and Evolution of Oceanic Lithosphere

Matthew B. Osman
(September, 2019)
Thesis in the field of Climate Science submitted to the Department of Earth, Atmospheric, and Planetary Sciences: Greenlandic Ice Archives of North Atlantic Common Era Climate

Deepa Rao
Thesis in the field of Biological Oceanography submitted to the Department of Earth, Atmospheric, and Planetary Sciences: Characterizing Cobalamin Cycling by Antarctic Marine Microbes Across Multiple Scales

Nicholas R. Rypkema
(September, 2019)
Thesis in the field of Electrical and Oceanographic Engineering submitted to the Department of Electrical Engineering and Computer Science: Underwater & Out of Sight: Towards Ubiquity in Underwater Robotics

Kevin Michael Sutherland
(February, 2020)
Thesis in the field of Chemical Oceanography and Biogeochemistry submitted to the Department of Earth, Atmospheric, and Planetary Sciences: New Insights into the Marine Oxygen Cycle from Manganese Oxide Minerals and Reactive Oxygen Species

Pedro Nuno Vaz Teixeira
(September, 2019)
Thesis in the field of Mechanical and Oceanographic Engineering submitted to the Department of Mechanical Engineering: Dense, Sonar-based Reconstruction of Underwater Scenes

Laura Grace Weber
(February, 2020)
Thesis in the field of Biological Oceanography submitted to the Department of Biology: Characterizing the Ecology of Coral Reef Microorganisms Across Different Scales within the Caribbean

Casey James Zakroff
(September, 2019)
Thesis in the field of Biological Oceanography submitted to the Department of Biology: Physiological and Behavioral Responses, and Their Variability, in Squid, *Doryteuthis Pealeii*, Embryos and Paralarvae Reared Under Chronic Ocean Acidification

MILITARY COMMISSIONS

United States Air Force

Second Lieutenant
Karen Camacho
Andrew Griese
Matthew Hutchinson
Ian Palmer
Thomas Rick
Arman Talkar

United States Army

Second Lieutenant
Henry Hanlon
Cole Legg
Wilbur Li
Steve Salvas
Rishi Shah
Rex Stockham
Robert Upton

United States Space Force

Second Lieutenant
Jay Laone
The first MIT student to be commissioned in the United States Space Force

United States Navy

Ensign
Kevin Carlson
Devon Goetz
Colt Hermesch
Jonathan Ledet
Warner McGhee
Thomas Strei III

Index of Degree Recipients

C

D

E

F

G

H

I

J

K

L

M

N

O

P

Q

R

S

T

U

V

W

COMMENCEMENT